

The Mining Journal, RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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No. 2591.—Vol. LV.

LONDON, SATURDAY, APRIL 18, 1885.

PRICE SIXPENCE.
BY POST, £1 4s. PER ANNUM.

**J. H. CROFTS, STOCK AND SHARE BROKER,
AND MINING SHARE DEALER.**
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
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BUSINESS transacted in all descriptions of MINING STOCKS and SHARES (British and Foreign), Consols, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Gas, Water, and Dock Shares, and all Miscellaneous Shares.

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DE BEER'S.

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SCHWAB'S GULLY.

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BRITISH AND FOREIGN MONTHLY MINING NEWS—STOCK

AND SHARE INVESTMENT NOTES—MINES, MINERALS, AND

METAL MARKETS—SHARE LIST No. 874, Vol. XVII., for APRIL

month, will shortly be ready, and will be sent to customers on application.

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50 New Callao, 4s. 6d.

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FIRST AWARD.
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THE INVENTORS, AND ORIGINAL PATENTEES AND MANUFACTURERS OF

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FOR USE IN ALL BLASTING OPERATIONS AND SPECIALLY PREPARED FOR ANY CLIMATE

Note the **TRADE MARK**: Two Separate threads through centre of Fuse.

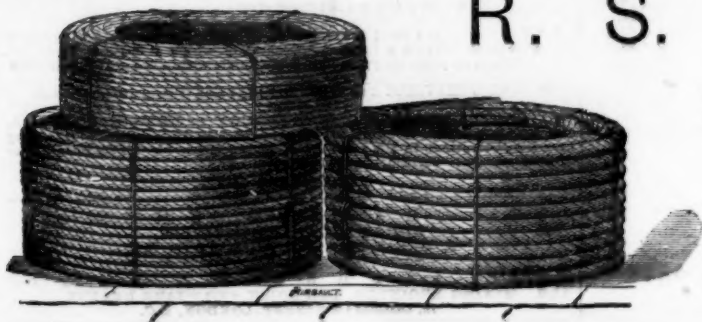
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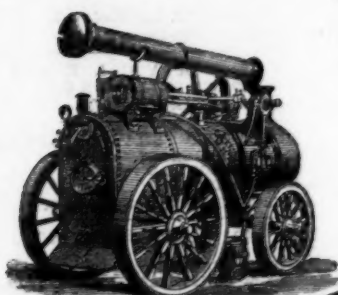
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IRON STEEL, AND COPPER CORDS. LIGHTNING CONDUCTORS
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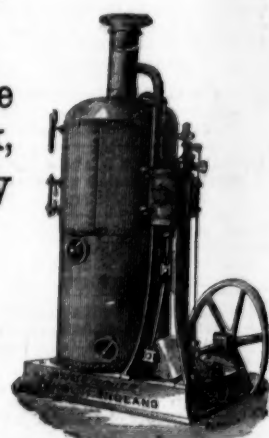
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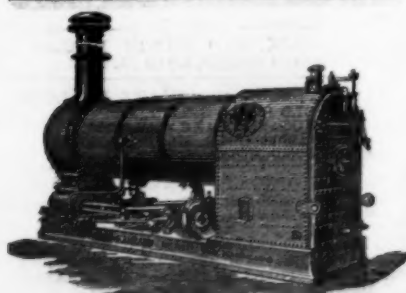


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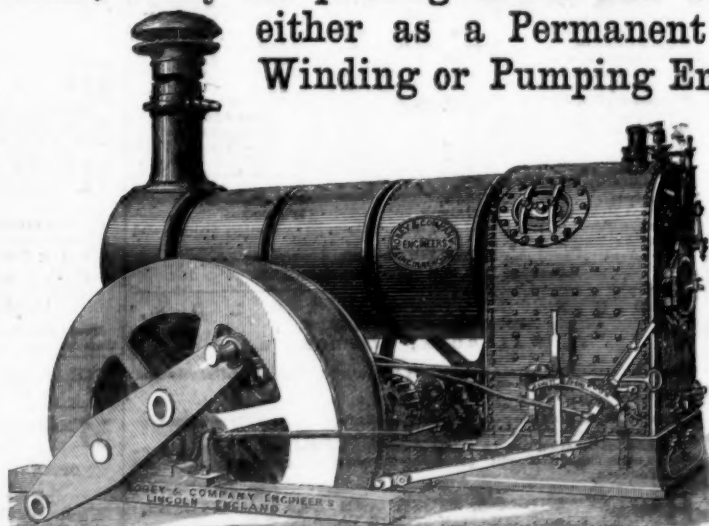
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The Improved Robey Fixed Engine and
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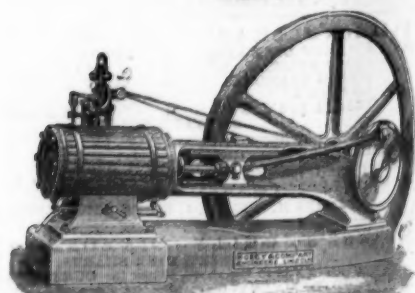


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Advantages in

Simplicity of Construction, Speed, Reliability, Half Timbering in Principals and Rafters saved.—NO BATTENS REQUIRED. Perfect Steamtightness. Facility for repairs.—NO SKILLED LABOR.

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Great Rapidity of Construction. WIND, Frost and Rusts EXCLUDED. NO DRIP possible. No Painting or Re-pointing.—GREAT SECURITY IN STORMS.

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CHILL, 1875.
PARIS, 1878.

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HIGHEST
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ESTABLISHED 1848.

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SAFETY FUSE MAKERS.

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SAFETY FUSE OF ALL DESCRIPTIONS SUPPLIED IN ANY LENGTH REQUIRED.

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of
Guttapercha Fuses.

Brunton's
Taped Guttapercha
Safety Fuse is
the Best Fuse for
use with Dynamite
in wet ground.
Fits the
Detonator without
unslipping.

R. HUDSON'S Patent Steel Trucks, Points and Crossings, PORTABLE RAILWAY, STEEL BUCKETS, &c., &c.

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(Near Gildersome Station Great Northern Railway Main Line, Bradford to Wakefield and London, via Laisterdyke and Ardsley Junctions.)
TELEPHONE No. 14, LEEDS EXCHANGE.

17.—SELF-CONTAINED TURNABLE,
Requiring no Foundation.



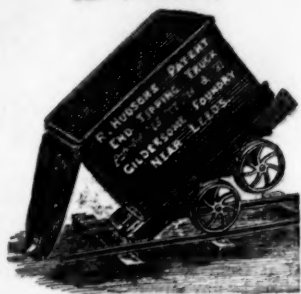
Upwards of 25,000 of these Trucks and Wagons have been supplied to the South African Diamond Mines; American, Spanish, Indian, and Welsh Gold, Silver, Copper, and Lead Mines; Indian and Brazilian Railways, and to Railway Contractors, Chemical Works, Brick Works, and Coal and Mineral Shippers, &c., &c., and can be made to lift off the underwork, to let down into the hold of a vessel, and easily replaced. They are also largely used in the Coal and other Mines in this country, and are the **LIGHTEST, STRONGEST**, and most CAPACIOUS made, infinitely stronger and lighter than wooden ones, and are all fitted with R. H.'s Patent "Rim" round top of wagons, requiring no rivets, and giving immense strength and rigidity. End and body plates are also joined on R. H.'s patent method, dispensing with angle-irons or corner plates.

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A. B. C. Code used.

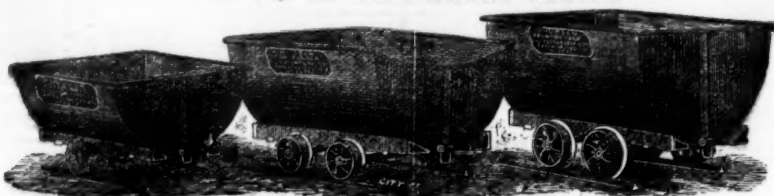
Patented in Europe, America, Australia, India, and British South Africa,
1875, 1877, 1878, 1881, and 1883. N.B.—The American, Australian, Indian, and Spanish Patents on Sale.

CAN BE MADE TO ANY SIZE, AND TO ANY GAUGE OF RAILS.

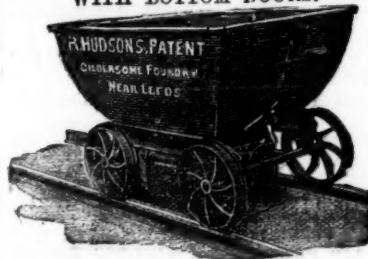
1.—PATENT STEEL END
TIP WAGONS.



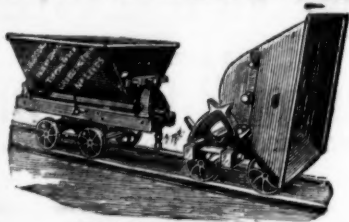
7.—PATENT STEEL MINING WAGONS.



12.—PATENT STEEL HOPPER WAGON,
WITH BOTTOM DOORS.



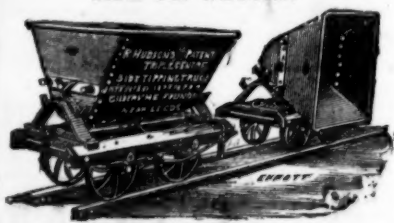
2.—PATENT UNIVERSAL TRIPLE-CENTRE
STEEL TIPPING TRUCK,
Will tip either side or either end of rails.



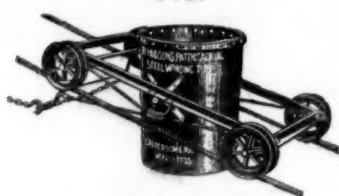
8.—PATENT DOUBLE-CENTRE STEEL
SIDE TIP WAGONS,
Will tip either side of Wagons.



3.—PATENT TRIPLE-CENTRE STEEL
SIDE TIP WAGONS.



18.—"AERIAL" STEEL WINDING
TUB.



4.—PATENT STEEL PLATFORM OR
SUGAR CANE WAGON.



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As supplied to H.M. War Office for the late war in Egypt.
DOUBLES the STRENGTH of ordinary Casks without any
INCREASE in weight.
(Made from 10 gals. capacity upwards to any desired size.)



10.—LEFT-HAND STEEL POINT
AND CROSSING.



11.—RIGHT AND LEFT-HAND
STEEL POINT AND CROSSING.

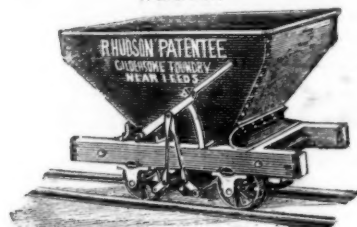


6.—ROBERT HUDSON'S
PATENT IMPROVED IRON SMITH'S HEARTH,
NO BRICKWORK REQUIRED.
A Special quality made almost entirely
in STEEL, effecting a GREAT SAVING
IN WEIGHT.



Large numbers in use by all the principal Engineers in this
country and abroad.

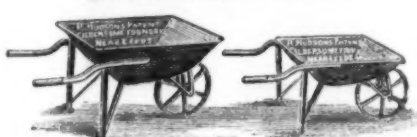
13.—PATENT STEEL HOPPER
WAGON.



19.—PATENT STEEL CHA GI G
BARROW.
DOUBLE the STRENGTH and much LIGHTER than
ordinary Barrows.



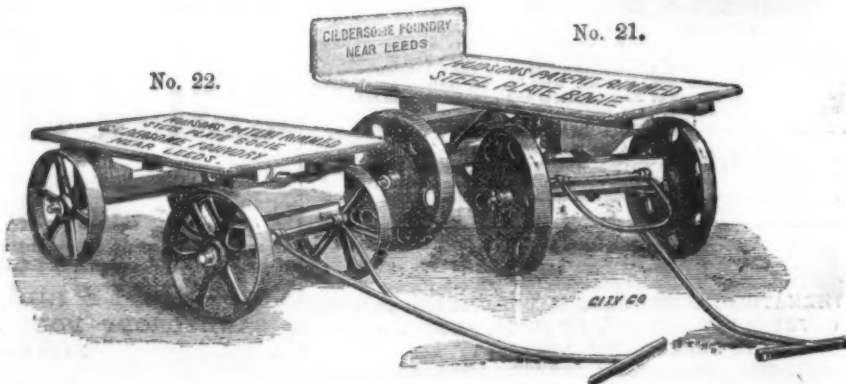
16.—PATENT STEEL WHEELBARROWS.
Made to any Size.
Lightest and Strongest in the Market.



14.—SELF-RIGHTING STEEL
TIP BUCKET.
(The "CATCH" can also be made SELF-
ACTING if desired.)



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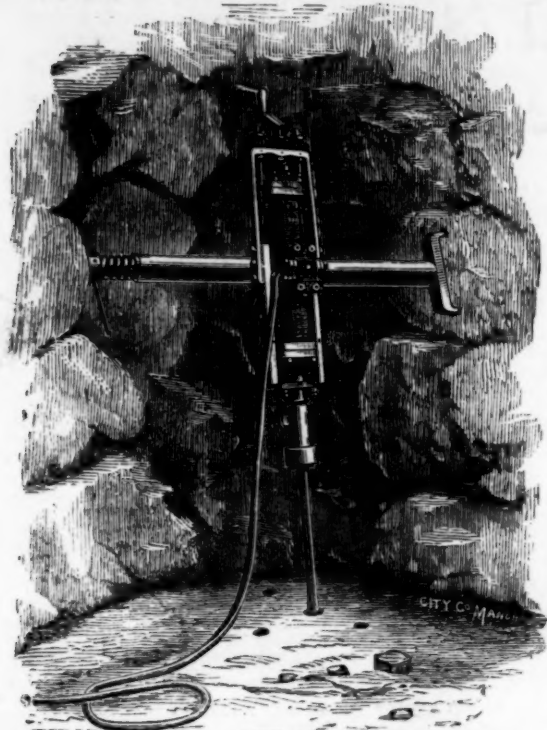


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the Consumption of Air.

JUBILEE EXHIBITION, 1882.
THE PATENT
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FIRST SILVER MEDAL AWARDED AT BORING COMPETITION, DOLCOATH MINE, 1881.
The "GORNISH" ROCK DRILL and "GORNISH" COMPRESSOR

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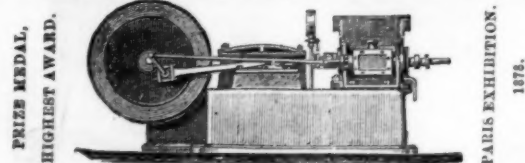
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AND
"RELIAANCE AIR-COMPRESSOR."

First Silver Medal awarded at Boring Competition, East Pool Mine, Sept. 1883.



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from 50 to 90 tons of tin stone, ordinary hardness, in 24 hours. The consumption
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In Good Condition, at Moderate Prices—viz,
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American Institute, 1873.
London International Exhibition, 1874.
Manchester Scientific Society, 1875.
Leeds Exhibition, 1875.
Royal Cornwall Polytechnic, 1875.

Rio de Janeiro Exhibition, 1875.
Australia Brisbane Exhibition, 1876.
Philadelphia Exhibition, 1876.
Royal Cornwall Polytechnic, 1877.
Mining Institute of Cornwall, 1877.
Paris Exhibition, 1878.

Wrought-Iron Steam Tubes.



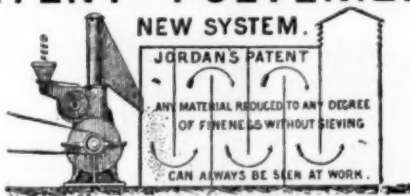
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TUBES FOR BOILERS, PERKINS'S, and other HOT-WATER SYSTEMS.

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April 16.

CANADIAN MINING, RAILWAY, AND GENERAL INTELLIGENCE.

SIR.—The spring opens in Canada with a little blow-out on the Saskatchewan river. Your readers will remember that, in 1869, Louis Riel, a French half-breed, created a disturbance, and took possession of the Hudson Bay property at Fort Garry. Then he had a sham court-martial, and murdered Scott; then he and his followers ruled for the winter. But on the approach of spring Lord Wolsley was sent up, starting in May and arriving in August, with a strong force. Riel and his followers dispersed, and Riel fled to the United States. After his term of exile had expired he came back, and taking up a residence in the vicinity of Fort Carlton, on the North Saskatchewan, began again to excite the half-breeds. Fort Carlton is about 500 miles north-west of Winnipeg, and about 250 miles from the Canadian Pacific. It is a strong Indian fort, and was in command of the mounted police. The disturbance has not at the present time been more than talk, although the accounts in some of the American papers and rumours from St. Paul and Chicago are to the effect that there has been a conflict, and that 15 of the mounted police have been killed; but this lacks confirmation.

The demand of the half-breeds in St. Laurent, about 50 miles south of Fort Carlton, are not without some show of justice, and if the business had been attended to last summer there would probably have been no trouble. The Metis population, or French half-breeds of Manitoba, received for every person who had been born in the country previous to 1st of July, 1870, a grant of 240 acres of land. Now the other Metis who live outside of Manitoba claim they have the same rights, and demand the same grant. Again, their boundaries were not respected, as they were laid out on the French plan a few rods on the river and 2 miles back forming a farm. The surveyors went on without considering the feelings of the people, and laid out the land in square blocks of 640 acres each, or 1 square mile.

It is reported that the 90th Regiment left Winnipeg for Qu'Appelle by train, and from thence will proceed to Fort Carlton. Probably there will be nothing but talk, and the half-breeds will quiet down, and not make fools of themselves by any overt acts. There is no trouble in any other part of the vast territory, and it is like a riot in England or any other country. The place is so remote that if they can catch Riel, and he will have hard work to get away this time, there will be short work with him if he has been guilty of rebellion against the Queen.

The Rich Silver and Gold Mines West of Port Arthur.—But while Riel is sporting himself away off on the Saskatchewan the attention of all thinking men has been turned to the mines and rich finds west of Port Arthur. As usual the Americans and the American papers are in the van with regard to our own country. The daily papers of Toronto seem to be more interested in repeating town gossip than in taking a comprehensive survey of the country, and keeping their readers posted on outside places and new developments. The *Duluth Times* gives an account of the visit of John McQuaine, the well-known mining man, to the new region. The regions visited were the Rabbit Mountain, Lake of the Woods, and White Fish districts. The sacks of ore he brought home were the best evidence of the richness of the mines. Beautiful specimens of garnet and mica were among them. He says that the country is being rapidly taken up, and that there will be a splendid mining region opened next summer. Another communication is as follows:—

The mining industry on the north shore of Lake Superior is again creating quite a stir among mining men in that portion of the province, and it is beginning to assume a very practical shape. The time was a few years ago when Silver Islet, a little rock standing above the waters of Lake Superior, astonished the world with the richness of the silver ore which it produced. But as no mine was started until recently on the main shore, which had an outlook of permanency about it, the interest once taken in the mineral resources of the country abated for a time, only to be revived again by new discoveries. A number of valuable recent discoveries have been made in the new silver region in the district of Thunder Bay, commencing at the Kaministiquia river, in the township of Paiponge, a few miles below the Kakabeka Falls, and extending through those portions of the country known as the Rabbit Mountain and Silver Mountain districts, on to White Fish Lake, Arrow river, and Pigeon river, the international boundary between the Province of Ontario and State of Minnesota, which State is now enjoying the benefits of the work in progress at the Vermillion Lake iron mines, and a gold fever of considerable warmth.

The Americans, it is said, have taken up fully 100,000 acres of land in the State of Minnesota, near the Canadian border, for gold mining purposes since the middle of last summer. Considerable prospecting and some mining have been going on all winter in that State. In Duluth it is the general impression that with the opening of spring and navigation will come a rush of mining men from the Western States to operate on the north shore of Lake Superior.

The Minnesota iron mines at Vermillion Lake are now established and permanent industries, and although the Americans have been very active since gold was discovered in that State last year, still in the active and larger development of mines of the more precious metals of gold and silver the Canadians, who commenced before their neighbours, are still leading.

Considerable prospecting and actual mining were done last season in the gold formation on the Canadian side, but the working mines in the silver district referred to have produced the greater development and the more satisfactory results. The amount of capital expended in these developments during the past year has in the aggregate been large. Three silver mines are now at work in the Rabbit Mountain district—the Rabbit Mountain, the Twin City, and the Beaver mines. Each one of these has raised and brought to surface a large amount of stamp rock, and considerable quantities of a very high grade of smelting ore. The Rabbit Mountain Mine made a shipment a year ago of a carload of ore taken from the first 10 ft. of its shaft which averaged \$645 per ton in silver. Since then the development at that mine has been steadily going on, and the company operating it are again shipping to New York by the carload, by the all-rail route via Winnipeg, some of their high grade ore which, it is said, will show a still higher average. The Twin City Mine, which was started last spring, has made one shipment, and it is prepared to make another of its high grade ore. The Beaver Mine, which was only started last fall, has now a considerable development, with a large quantity of rich ore in sight. These mines are adjacent to and south of the township of Paiponge, within 25 miles of Port Arthur and 18 miles of Fort William. It is not likely that the total value of their productions will be ascertained until proper roads are made affording transportation facilities for taking in suitable machinery for treating at these mines the mill rock on their dumps. The colonization wagon-road from Murrillo station on the Canadian Pacific Railway through the township of Paiponge and the country south and west of it to the Silver Mountain Mine, towards the construction of which a grant by the Ontario Government is expected in this year's estimates, and the proposed construction of the Thunder Bay Colonization Railway, already chartered to run the same region, will greatly facilitate the cheaper working of these mines with proper machinery, as well as those now being developed at Silver Mountain, where there is a great deal of excitement over recent discoveries, and around White Fish Lake. In this neighbourhood several companies have already commenced work. Besides the increased facilities which the proposed wagon road and railway will give to this new silver region, they will open up for a settlement a large tract of valuable timber and good agricultural land, which will greatly benefit the mining industry and the inhabitants of the district at large.

The *Duluth press* and a Port Arthur correspondent of the *Chicago Mining Review* predict several new enterprises and a large increase of prospectors and mining men, in fact a genuine mining boom this coming summer on the north shore of Lake Superior, which for some time past has been known to be a rich mineral country.

The fact seems to be that between Port Arthur and the Lake of

the Woods mines of great riches have been discovered, and it only requires some Cornish pluck and capital to make the men who first take them up exceedingly wealthy. There is an excitement in mining, and when you have the solid gold and silver there is no reason why another city like Melbourne or San Francisco should not arise on the shores of Thunder Bay. The facilities for reaching there are much better and much quicker than either to Melbourne or San Francisco, and there seems no doubt that the account of the finds are true. If a party of experienced miners were to start from Liverpool in ten days they would be in Toronto, and in four days more on the diggings. But they should come in parties with enough capital to buy the land when they find the veins. The land is worth \$1, or 4s. an acre for milling locations, and you have to pay a surveyor to get it surveyed. The Ontario Government, although they made such a great fuss in getting the territory and going to the Privy Council, do not seem to take care of it, and have not had it even surveyed.

A Mining Association.—While the British Science Association was here in the summer there were great complaints about not having any Government statistics with regard to our mines. Something must be done for Ontario, and we shall have to push Mr. Mowat on to do his duty. It is for that purpose that it is proposed to get up a mining association.

The weather in Ontario has been very backward. The bay at Toronto was still frozen over on the 26th of March, and it is hardly possible it can be free from ice before two weeks. Ice boats now glide over the surface. In the north-west and at Calgary they have had comparatively mild weather.

Toronto, March 28.

GOLD COAST.

SIR.—It is very gratifying to see in your last number Mr. Gowan's name once more in print, especially the generous manner in which he offers every information. I am persuaded that there is a rich field for the enterprising part of the English public on the Gold Coast, West Africa, and only requires a honest and straightforward man at the helm. Could not Mr. Gowan undertake to satisfy the capitalists, for instance, by giving a description (say) of the following mines and their shortcomings—namely, the Gold Coast, Effuenta, and the Tacuash—all, I believe, in a line joining each other. The capitalists only require to be connected with men of honour and experience to grapple with the duties of directors, manager, &c. Under such circumstances there is no doubt but these properties could be easily and satisfactorily syndicated. Union is strength in all such enterprises. Where confidence is established there can be no difficulty in arriving at successful results. Australia is opening up its resources, and promises well for the future; but the West Coast is much nearer home, and, like the former, under English control bids fair to rival in the golden treasure. One of the Gold Coast mines have just sent home a sample weighing 7 cwt., and the result is an average assay of 20 ozs. of gold to the ton—quite enough to satisfy the most fastidious. Also have cut an additional rich reef since the departure of sample.—London, April 15.

E. W.

THE LLANGOLLEN SLATE DISTRICT.

SIR.—Your North Wales correspondent last week remarks that the quarries in this district have not been doing much of late, with the exception of the Llangollen Slab and Slate Company (Limited). Perhaps you will allow me to state that the Pant Glas Slate and Slab Company (Limited), whose offices are at Llangollen, have had, since the company was formed, and still have, far larger orders than can be supplied from their quarries. Orders sufficient to keep a large quarry at work have had to be refused during the past year. This is owing, no doubt, in part to the facilities mentioned by your correspondent, Llangollen being well served both by rail and canal, with a seaport within easy reach, and the rates to most of the large towns in England and Scotland being considerably lower than from any other slate district. But it is also undoubtedly owing to the excellent quality and colour of the slates, the colour being uniform, no one slate showing on a roof a lighter or darker shade of blue than the others, and being so straight that a practical slater informed me he could cover more roof in a given time with these slates than he could with almost any other.

Llangollen, North Wales, April 16.

FRANCIS E. ROOPER.

GUNPOWDER IN MINES.

The following is from the *Times*:—
SIR.—It is gratifying to hear of the interest which the public-spirited proposal of Mr. Ellis Lever has created in offering a prize of 5000l. to the discoverer of a safe and efficient substitute for gunpowder in mines, but it is surprising, and somewhat discouraging to find it stated in a technical journal that, in order to be received with favour in mining centres, such a method must combine in itself not only absolute safety but all the ease, economy, expedition, and efficiency now afforded by the present plan of shot-firing. Seeing that some of these advantages can only be obtained to the fullest extent by the employment of gunpowder, it would seem that those who now use it attach less importance to the dangers it entails than to the possibility of having to forego any of its advantages by the adoption of other means of coal getting. Since the 1st of March of this year upwards of 430 lives have been sacrificed from explosions alone in collieries at home and abroad, bringing widespread misery and distress on the widows and children of those who have perished, and although only between 40 and 50 were miners in this country, who can say that a gigantic disaster like those of Karwin and Camphausen may not occur at any moment in one of our large collieries employing hundreds of workmen? It seems a strange anomaly that a Government which protects by legislation the lives, limbs, and even health of factory operatives should hesitate any longer to prohibit the continuance of a cause of danger to our miners which may at any moment entail a fearful destruction of life, and the risks of which are fully recognised by the Inspectors of Mines themselves, especially when we consider that there are systems of coal getting now in daily use in some collieries giving not only absolute safety from explosions but fairly satisfactory commercial results. Surely no reasonable excuse can still be urged in favour of the continued use of powder, with its attendant risks, and even if any trifling advantages of convenience or economy were afforded by its employment they ought not to be allowed to take precedence of the plain duty of protecting as far as possible the lives of a class of workmen whose labour contributes so much to our domestic comfort and to the prosperity of a nation justly proud of its humanity. I trust that the furtherance of this laudable object may be promoted, and its success assured, not only by the liberal offer of a private individual but by the force of public opinion, and by the prohibition by law of a cause of danger so well recognised as the use of gunpowder in mines.

J. R. HERON MAXWELL.

Carlton Club, Pall Mall.

THE RAILWAY RATES AND BILLS.—The Manchester and Salford Trades Council have passed a resolution to the effect that it views with alarm the proposal for increased terminal and other charges provided for in the Bills introduced into Parliament by the leading English Railway Companies; and further, the Council expresses its opinion that the trade of the country has been ignored and its expansion curtailed, by unequal and very excessive railway rates which have caused the removal of some of the industries to other parts of the country, thus entailing great hardships upon artisans by depriving them of their work or compelling them at great expense and loss to seek employment in other parts of the country.

HOLLOWAY'S OINTMENT AND PILLS—EVER USEFUL.—The afflicted by illness should look their diseases fully in the face, and at once seek a remedy for them. A short search will convince the most sceptical that these noble medicines have afforded ease, comfort, and oftentimes complete recovery, to the most tortured sufferers. This ointment will cure all descriptions of sores, wounds, bad legs, eruptions, erysipelas, rheumatism, gout, and skin affections. The pills never fail in correcting and strengthening the stomach, and in restoring a deranged liver to a wholesome condition, in rousing torpid kidneys to increase their secretions, and in re-establishing the natural healthy activity of the bowels. Holloway's are the remedies for complaints of all classes of society.

Trade Reports.

CORNWALL.

April 16.—Actual warfare would be less detrimental to the interests of local mining than the present state of strained uncertainty; and it will be a relief here when it comes to a close, even if the result is hostilities. We are not of those who believe that war time is always a good time for mining industry; but for all that we believe that just at present mining, by comparison with other occupations, would rather, for the time, gain than lose. But the sooner the present state of suspense comes to an end the better, for activity just now is out of the question.

The number of existing mines in Cornwall has been recently estimated at 150. All told, however, we very much question whether there is even nominally, and anything like that number in both Cornwall and Devon. At any rate, we cannot reckon up that total, even when everything in operative mining shape is pressed into the service. But whether this number of mines exists or not, we are confident that there are not more than 100 mines in the two counties put together that are really in active existence; for not a few are in what may be fairly called a state of suspended animation. It is quite as well this should be clearly understood, so that mining generally should not be saddled with the results of what in several cases is little more than a name. The report of the Inspector of Mines, which sets forth the number of hands employed at the different concerns, is very instructive reading in that particular, and is the only official document on the matter we have. We question much whether investors make all the use of it they might and should.

The figures which have been published with regard to the production of china-clay in the West, while accurate as far as they go, are apt to mislead in one particular—the shipments made at Plymouth. In all a total shipment at this port of some 18,500 tons is shown; but this is practically only the Cornish contribution, and does not include the shipment made by Messrs. Martin, of Lee Moor, which is almost wholly sent off from their own quays at Cattewater. If their production is added to the Cornish contingent Plymouth would stand a good fourth on the list of china-clay ports, following Fowey, Charleston, and Par; and, with the exception of these three ports only, it ships more china-clay than all the others put together. Within the next four or five years moreover the Plymouth shipment is likely to be largely increased from various sources.

The suggestion has once more been made that tin should be sold by ticket; but it is not likely to meet with much favour. A more change in the method of sale will not create a competition where none exists among the smelters; and what reason can there be for objecting to the trial of mine smelting, which we are told indeed will not answer, but which ought not to be shuffled aside in that easy way? If there is a profit on smelting why should not the adventurers have it? If there is not, on what do the smelters flourish? This slowness of movement is one of the most serious drawbacks we have to deal with.

As to dues reform there seems a little hope, seeing that it is being taken up outside the district on the only equitable basis so long advocated in this column—payment out of profits only. When that is secured elsewhere no doubt Cornwall will be quite ready to follow suit.

The effort made to rearrange the constituencies of the county as first set forth by the Government has failed, and on the scheme of the Boundary Commission Cornwall has a "mining constituency" in the union of Redruth and Camborne. How the mining is to be benefited by the arrangement it is not easy to see. Hitherto all the Cornish members, with perhaps one exception only, have been mining representatives, and have pulled together "one and all." Politically the results may be important however.

SOUTH WALES.

April 16.—The returns of the Coal Trade for the month of March show a considerable improvement upon January and February, but a slight falling off as compared with the corresponding months of last year. Cardiff sent away 675,200 tons foreign and 93,999 coastwise, with 22,692 tons patent fuel and 6938 coke; Newport, 154,654 tons foreign and 103,881 coastwise; Swansea, 71,498 tons foreign and 64,738 coastwise, with 29,130 tons coke. Last week Cardiff sent away 130,599 tons foreign and about 23,000 coastwise, with 2909 tons patent fuel; Newport, 25,049 tons foreign and 19,069 coastwise; Swansea, 17,049 tons foreign and about 12,000 coastwise, with 6225 tons patent fuel. Some merchants complain of want of orders, but there is not much on the whole to grumble at. Small steam coal and patent fuel are in excellent demand, and prices are firm.

The Penalta Colliery, near Llancaich, has been re-started. This colliery contains a portion of the celebrated Mynyddiawys seam.

The amount of iron sent away from South Wales ports in March was:—Newport, 8623 tons; Cardiff, 5670; Swansea, 618. Iron ore has arrived at Cardiff to the extent of 6520 tons from Bilbao, and 426 from other places. Newport received 5153 tons from Bilbao.

The alterations necessary for making steel sleepers at Dowlais are being proceeded with rapidly, and every facility for a large output will be soon available.

There is some improvement to report in the Tin Trade. Prices are firmer. Good IC cokes fetch from 13s. 6d. to 14s. 3d.; steel plates, 14s. 3d. to 14s. 9d.; charcoal plates, 16s. 6d. to 17s.; and best from 17s. 3d. to 18s. 9d. Tin fell 2l. per ton during the week, and is now quoted at 77l. 10s.

NORTH WALES, SALOP, AND CARDIGAN.

April 16.—Passing through the Shropshire lead mining district last week I was glad to see that the new chimney of the Snailbeach Smelting Works was completed, and to hear that to some extent work was to be resumed at the mine this week. Through the recent death of a landowner in the same region several small collieries may now, it is thought, be able to resume work. At the Middletown Barytes Mine last week a man who had been recently put to drive the engine got entangled in the wheels and was killed. An appreciable quantity of barytes and some lead is being sent off monthly from the Perkins Beach Mine. The important freestone quarries at Grinshill, near Shrewsbury, keep in work, and one cannot but think that the well-directed efforts the use of this beautiful building stone ought to be largely increased. The collieries of South Shropshire, bordering the Great Western main line, have a more abandoned and forlorn aspect every year. Some more distant portions of this coal field are, however, in active work.

A meeting was held in Chester, last Saturday, of the promoters of the various Conservancy schemes in connection with the River Dee, and another meeting is to be held next Monday to confer with Lord Wenlock and others who have proprietary rights in the river.

The owners of the Manod Slate Quarry, Festiniog, have been fined 20s. and costs for neglecting to furnish the Government Inspector of Mines with the proper return. The defendants pleaded that they were under the impression that if no slate

had been sold the return was not necessary. The Inspector, however, pointed out that the omission of one return delayed the publication of the whole of the information relative to mines and quarries. The slate trade is fairly good, without, however, showing many signs of animation. A charge of embezzlement brought by the owners of the Nantlle Vale Slate Quarry against their manager, Mr. Ellis Roberts, has after several hearings been dismissed by the magistrates at Carnarvon. The increase of trade on the borders of North Wales may be inferred from the fact that the rateable value of the City of Chester has during the last 40 years increased from 50,000*l.* to upwards of 160,000*l.* There is a lack of activity among the collieries, although they all keep in work. So also with the ironworks. There is but little doing among the lead mines of Flint and Denbigh. The royalties in the first-named county are as high as one-eighth, and it will be seen at once that in the present state of things profitable lead mining is impossible. Most of the other industries of the district are in active work.

TYNE AND WEAR.

April 16.—The war rumours have caused great excitement on Change here, and they have had a very injurious effect on trade generally. The business done between these rivers and the Baltic, Black Sea, &c., is very extensive, and as these trades, that is the spring trade, was opening out, the effect has been very detrimental. Merchants and traders of all kinds are now standing aside in a state of doubt as to the course events will take. Coal shippers to the North of Europe who hold orders do not care to proceed much at present. On the north side of the Tyne the owners and colliery managers complain much of the limited demand for their produce, and only the best collieries are fairly employed; second-class works are only employed to a limited extent.

Shippers of produce to the Baltic and other districts demand higher rates for freight, and home rates from those foreign stations have risen already considerably. From the Durham coal field the shipments of gas coals to foreign stations still continue large, although the shipments coastwise have fallen off to some extent; there is also a better enquiry for smith coal for shipment foreign.

For coke there is a good demand for foreign shipment, and the total shipment of this important article for March exceeded to a considerable extent the shipments in March last year. On the Wear there is a much better demand for household coal, and prices are improving. Small coals are now very much enquired after, and prices are much better; the turns at colliery offices are longer, and the stocks at the collieries are rapidly disappearing. The holidays and the strikes in Yorkshire may have caused to some extent this improvement, but the demand independent of these causes is greater.

During the present week coal has been sent from the Tyne to South Yorkshire for railway purposes, and the quantity is expected to increase daily until there is a settlement of the dispute as stocks are about exhausted. There are also a few enquires for shipment at Hull, but this may not lead to business. There are also some enquires here for coke for South Yorkshire, and this will in all probability lead to business.

All the bodies of the men killed by the explosion at the Usworth Colliery have now been recovered, and considerable progress has been made in clearing the falls in the main roads and in ventilating the interior workings. Work will therefore it is expected be resumed very shortly in the east pit; the workings in this division of the pit were not at all injured by the explosion, and work might have been resumed some time ago, but the men objected until all the bodies had been recovered.

The past week has been one of great stagnation in the iron trade. The holidays of course caused dulness, and at the Quarterly Meeting the attendance was extremely small; there is very little demand, and the market is in an unsatisfactory condition. The shipments of pig-metal to the Continent have been disappointing; the chief deliveries still continue coastwise to Scotland and Wales. There is no change of consequence in prices, No. 3 is generally 3*l.* 4*s.* per ton.

There is little new in connection with the manufactured iron and steel trades, and no change from late prices. Taken as a whole, however, there are better prospects and more work in hand than there was six weeks ago; much will depend on the number of new ships ordered during the ensuing season.

Engineering, bridge-building, and other allied industries, are reported to be fairly supplied with orders; but some of the principal engineers here have given their men a long holiday for Easter, which makes it clear that they are not pressed for the execution of orders.

An order has been received at Elswick for a large number of guns, and there is great activity in every department of the works. The almost certain prospect of war has caused a great rise in freights, both outwards and homeward. The rise is greatest to the Baltic and Black Sea, and return freights from those regions, but they are also improving to the Mediterranean and the East generally. This may have the effect of getting more vessels employed, a large number still continues unemployed in these rivers. At the meeting of the River Tyne Commission, on April 10, it was reported that in the Tyne alone there was on the 2nd inst. laid up 90 steamers and 26 sailing vessels, or a total tonnage of 88,170.

NORTHERN INSTITUTE OF MINING AND MECHANICAL ENGINEERS.—A general meeting of the members of this Institute was held on Saturday, in the Wood Memorial Hall, Newcastle.—Mr. John Daglish in the chair. A paper by Mr. C. Leach, "On the Shrinking of Paper," was read. The paper contains an account of some very lengthy and accurate experiments upon the shrinkage of various kinds of drawing paper under various conditions to which it is subjected as a medium of plotting and mapping. The subject is certainly very important, as the phenomena described affects to a certain extent the accuracy of colliery plans and maps. It appears that the sizes measure least in August and June, and greatest in February and December, the extreme variation being somewhere about 10 links, or a little over two yards. The whole of the elaborate experiments made by the author of the paper show that cartridge paper expands and contracts least. The President proposed a vote of thanks to Mr. Leach for his paper, which was seconded by Mr. Laws, who said that the paper referred to a subject of interest to engineers and surveyors. The motion was, of course, agreed to. Mr. J. Routledge read a paper "On the Routledge and Johnson Double Combination Miners' Safety-Lamp." Two varieties of the lamp were shown. First, it is a combination of the ordinary Davy Lamp, with the single gauze surrounded by a Clanny lamp, the gauzes of both lamps being protected by a shield. The advantage claimed is that should the glass of the Clanny break, the lamp will still be in the position of a Davy. The second variety of the lamp is that in which a small Clanny lamp is substituted for the interior Davy of the first. In this only the outside gauze is shielded, but a chimney is put into the centre of the interior gauze of the second and smaller Clanny. It is stated that those lamps have been subjected to hundreds of trials in an explosive mixture ranging in velocity from 6 to 50 ft. per second, and in no case have they been fired.

The lamp is certainly a most extraordinary one. First we have a Davy and Clanny lamp combined, and in the second variety we

have two Clanny lamps, a smaller one within a larger. The fact that the flame cannot be passed through it even with the highest velocities is certainly very important; but we are afraid that in practice the lamp will be found cumbersome, and also that the first cost will be high. The weight of a lamp and the cost of its construction and the cost of keeping it in repair subsequently are very important matters. It is curious to notice how tentatively the old Davy lamp has kept its ground, mainly, no doubt, on account of its simplicity and portability. This lamp has, however, been much improved in late years by the addition of a tin case, which covers the lamp entirely, only a window is provided in front, where the light is emitted, and it is no doubt a very good lamp for horse drivers and all who have to move about in mines. The Clanny lamp is much used by hewers and others who work at a station, so that the lamp can be fixed up on a stand. The Stephenson lamp, as is well known, was introduced into some of the most fiery mines in Durham in the year 1833. This lamp has a gauze like the Davy, and also a glass inside the gauze, so that if the glass is broken the lamp becomes a Davy (as is claimed for the Routledge lamp). The Stephenson lamp is much safer than the Davy or Clanny, and in its modern state it is also a very handsome lamp, and not much weight, yet, strange to say, this lamp on which Stephenson expended so much genius and industry has made very little general progress.

NORTH AND SOUTH STAFFORDSHIRE.

April 16.—A very gratifying feature has this week appeared in the local coal trade. It is that of renewed activity once again amongst the coalmasters in the Cannock Chase field. Certain of these are this week raising more coal than at any date for six months past. Their prosperity indicates the truth of the proverb, "Tis an ill wind that blows no one good," for it is to be attributed to the stoppage of the pits in South Yorkshire. The supplies to London from that district being cut off, the orders are coming to the Chase, and heavy trains are being daily loaded for the Metropolis. The advance of between 1*s.* and 2*s.* per ton on the London coal market is issuing in certain of the Chase owners getting better prices for the supplies now being hurried forward by 1*s.* per ton, compared with the rates that generally rule. Black Country rates for manufactured coal are unchanged. The Iron Trade shows but little alteration since the Quarterly Meetings. The demand is not rising for either pig or finished iron, and the outturn remains restricted in both branches. Prices are easy but not without change on the basis of last week's quotations.

The colliers' strike in North Staffordshire has come to an end so far as the Rosemary Colliery, Knutton, near Newcastle-under-Lyme, of Mr. J. N. Peake, is concerned. This proprietor demanded a reduction in wages of 10 per cent., and for several weeks the men have steadfastly resisted the proposal. Now, however, they have submitted to the masters' terms, and the pits have resumed their customary activity.

An appeal is being made on behalf of the 400 men who have been thrown idle by the closing of the Longton Hall Colliery of Messrs. Glover.

LANCASHIRE.

April 16.—A general stagnation of business has characterised all branches of the Iron Trade during the past week, and, so far as the trade in the very depressed condition which has prevailed for so long a period could be injuriously affected, it may be said that the threatened warlike complications of the last few days have operated as a further check upon the weight of business doing, and for the moment it is limited to the smallest possible dimensions. In fact, so long as the present uncertainty continues as to the ultimate issue of the existing crisis both buyers and sellers will hesitate about entering into transactions of any importance. For pig-iron the enquiry is extremely small, and although quoted prices are without change there is, if anything, a tendency here and there to take less money to effect sales for prompt delivery. For good local and district brands, delivered equal to Manchester 40*s.* to 40*s.* 6*d.*, less 2½, remain the average quoted rates, with a disposition to give way a little in some cases, and one or two distinct brands offering at about 38*s.* 6*d.* to 39*s.*, less 2½. The hematite trade continues very depressed, and good foundry brands are offered at 52*s.* to 52*s.* 6*d.*, less 2½, delivered here, without, however, bringing forward buyers. In the finished iron trade a generally quiet tone has again to be reported, and shipping orders are for the present held in abeyance. Prices are, however, maintained on the basis of 5*l.* 7*s.* 6*d.* for good qualities of bars delivered here, and some of the North Country makers are not disposed to take within 2*s.* 6*d.* per ton of the low prices which were accepted a short time back.

In the Engineering Trades the private locomotive building firms continue very busy, and have work in hand for some time forward; but in most branches of engineering a slackness seems to be coming over trade.

A steady demand is reported for all descriptions of house fire coal, and the more serious aspect assumed by the Yorkshire strike has brought somewhat a pressure of orders from buyers, who have hitherto been obtaining supplies from the above district, with the result that prices have in many cases been advanced about 6*d.* per ton. Other classes of fuel are, however, without material change. For the best Wigan Arley the average price is now 9*s.* per ton at the pit, and medium house coal, such as seconds, Arley, and Pemberton Four-ft., are firm at 7*s.* 6*d.* as the minimum, whilst common house coals, which last week could have been got readily at 5*s.* 6*d.*, are now held firmly for 6*s.* per ton. Common round coals for steam and forge purposes, however, still meet with only a limited demand, and the heavy stocks that are held operate against any material advance, 5*s.* 6*d.* at the pit being still the full average figure. Engine classes of fuel also meet with only a moderate sale at about 4*s.* 6*d.* to 5*s.* for burgy, and 3*s.* up to 4*s.* for slack at the pit mouth.

Shipping has been rather more active, but prices have not shown any material improvement, 7*s.* to 7*s.* 3*d.* per ton being the average figures for good qualities delivered at the High Level Liverpool, or the Garston Docks.

Pits in the Lancashire district have since the holidays been generally kept on pretty near full time.

COPPER, TIN, AND LEAD.—Messrs. HENRY ROGERS, SONS, and Co. write under date April 9:—Serious news is to hand, which, however, is as yet not fully confirmed. Should war ensue a new situation will be developed, and our markets will for a time be wholly influenced by the new considerations arising from it. The deliveries of copper in England and France during March have totalled 552 tons, but notwithstanding this we again have a slight increase to our total visible supply. The disturbed political position, and the almost complete cessation of any buying for India, have been against the market. Chili bars have been sold as low as 44*l.* 15*s.* The renewal of the contracts for the supply of Anaconda copper until the end of the year, showing that our American supplies will not fall off this year, and disappointing those who viewed 45*l.* per ton as a price which must speedily check production. The shipments of tin during March have been moderate, 1125 tons from the Straits and 775 from Australia. Notwithstanding this stocks have only decreased some 70 tons. Recent cable advices are to the effect that supplies are coming to hand more freely in the Straits, and we anticipate larger shipments during April. If, as some estimates represent, the landed stock in America at the beginning of this month was only 350 tons, we must have a large buying on American accounts. In most quarters, however, the estimate referred to is believed to be erroneous, and other authorities give varying figures up to 2500 tons, including about. The lead market has remained quiet, but without any symptoms of further weakness, at 10*l.* 7*s.* 6*d.* for Spanish, and 10*l.* 12*s.* 6*d.* for English.

FOREIGN MINING AND METALLURGY.

An adjudication of plant which has just taken place for the Belgian vicinal railways has afforded a fresh illustration of the general weakness of quotations. All the contracts offered for adjudication were freely competed for, and the prices at which tenders were submitted were very low, although the quantity of material required was not very considerable. English pig has been quoted at 1*l.* 18*s.* 6*d.* to 1*l.* 18*s.* 9*d.* per ton upon the Belgian markets. Refining pig hard iron has brought 1*l.* 18*s.* 4*d.* per ton; ordinary ditto, 1*l.* 15*s.* per ton; and mixed ditto, 1*l.* 12*s.* per ton. No. 1 iron has made 4*l.* 8*s.* per ton for exportation, and 4*l.* 10*s.* per ton on home account; No. 2 has been quoted at 4*l.* 14*s.* per ton; and No. 3, at 5*l.* per ton. Girders have ranged between 4*l.* 14*s.* and 4*l.* 18*s.* per ton. No. 3 plates have made 5*l.* 12*s.* per ton for exportation; and No. 2, 5*l.* 14*s.* per ton upon home account. Plates of commerce have been priced at 8*l.* 2*s.* per ton. The exports of iron minerals from Belgium in the first two months of this year were 30,589 tons, as compared with 36,757 tons in the corresponding period of 1884. Cast-steel rails were exported from Belgium in the first two months of this year to the extent of 2988 tons, and iron rails to the extent of 282 tons. The corresponding exports in the corresponding period of 1884 were:—Steel rails, 1274 tons; iron rails, 1617 tons. The exports of plates from Belgium in the first two months of this year amounted to 3278 tons, as compared with 5268 tons in the corresponding period of 1884. The Phoenix Machinery Company realised a net profit of 217*l.* last year. This small balance did not, of course, admit of the payment of a dividend for the year; but the general condition of the company is stated to be not unsatisfactory.

The condition of the Belgian Coal Trade has experienced scarcely any change, and no important variation is anticipated until the approach of the winter of 1885-6. Prices have been pretty well maintained, and concessions have not been too much the order of the day. Coke has not sold on an average below 10*s.* per ton. The imports of coal into Belgium in the first two months of this year are officially returned at 209,306 tons, as compared with 195,259 tons in the corresponding period of 1884. In these totals English coal figured for 50,207 tons, and 39,414 tons respectively. The imports of coke into Belgium in the first two months of this year amounted to 2771 tons, as compared with 8806 tons in the corresponding period of 1884. The exports of coal from Belgium in the first two months of this year attained a total of 667,724 tons, as compared with 673,413 tons in the corresponding period of 1884. In these totals the exports to France figured for 626,539 tons and 635,741 tons respectively. The exports of coke from Belgium in the first two months of this year were 138,839 tons, as compared with 142,740 tons in the corresponding period of 1884. France figured in these totals for 123,814 tons, and 127,737 tons respectively. Belgian coke appears to be making a little progress in the Luxembourg. The Marihay Collieries Company has announced a dividend of 1*l.* 4*s.* per share for 1884. Meetings are announced as follows:—Bonne-Verne Colliery Company, April 18, at Mons; Belgian Collieries Company, April 19, at Mons; Bois de Cazier Colliery Company, April 20, at Marcinelle (Charleroi); Abhoos Colliery Company, April 21, at Herstal; and Fontaine l'Eveque Collieries Company, April 22, at Fontaine l'Eveque.

Prices have not varied in the French Iron Trade, but orders have become rather scarce. Prices have been maintained upon the whole, but at the same time the foremasters of the Nord have not been able to quote prices at all higher. The Quarterly Bulletin of the Committee of French Foremasters states that the Orleans Railway Company has ordered 25,000 tons of rails from the Steelworks Company of France. These rails are to be supplied as follows:—Half at 5*l.* 3*s.* 7*d.* per ton, and half at 5*l.* 8*s.* 6*d.* per ton. The same company has also ordered 1000 tons of dephosphorised steel rails from MM. de Wendel, at 5*l.* per fathom. The Eastern of France Railway Company has ordered 232 iron tyres from MM. de Dietrich and Co., at 12*l.* 16*s.* per ton. There is little news of importance to communicate with respect to the German iron trade, prices remaining almost entirely stationary. Bochum has tendered at Erfurt at 16*l.* 14*s.* 9*d.* per ton for axles. A contract for 1500 tyres for tenders and trucks has been divided at Breslau between the Borsig, Oberbilk, and Osnabruck Works. Representatives of rolling-mills in Silesia, the Rhenish Provinces, and Westphalia will meet shortly at Berlin in order to form a syndicate with the view of securing an advance of 1*l.* per ton in iron, if possible. Great difficulties of course attend the realisation of any such project as this. Some of the Austrian works are also, however, on syndicate thoughts intent.

QUICKSILVER.

	1884.	1885.
Imports from Jan. 1 to March 31, bottles, about	30,070	about 17,387
Exports " " " "	12,708	" 10,353
Imports for March " " "	20,327	" 8,434
Exports " " " "	3,413	" 3,916
Price per bottle, about	£5 10 0	£6 0
Stock in London to March 31, 1885, roughly calculated, is about	78,500 bottles.—London, April 10. J. BENNETT BROTHERS.	

COMMERCIAL FAILURES.

The number of failures in England and Wales gazetted during the week ending Saturday, April 11, was 40. The number in the corresponding week of last year was 73, showing a decrease of 33, being a net decrease in 1885, to date, of 90.

The failures were distributed amongst the following trades, and, for comparison, we give the number in each in the corresponding weeks in 1883 and 1884:—

	1885.	1884.	1883.
Building trades.....	4	9	21
Chemists and druggists.....	1	—	2
Coal and mining trades.....	2	2	2
Corn, cattle, and seed trades.....	2	2	4
Drapery, silk, and woollen trades.....	5	6	21
Earthenware trades.....	—	—	6
Farmers.....	2	4	7
Furniture and upholstery trades.....	1	—	—
Grocery and provision trades.....	5	11	35
Hardware and metal trades.....	1	1	7
Iron and steel trades.....	1	3	8
Jewellery and fancy trades.....	3	2	10
Leather and coach trades.....	4	5	13
Merchants, brokers, and agents.....	2	11	31
Printing and stationery trades.....	—	—	8
Wine, spirit, and beer trades.....	2	6	18
Miscellaneous.....	5	11	19
Totals for England and Wales.....	40	73	213
Scotland.....	15	29	22
Ireland.....	4	6	8
Totals for United Kingdom.....	59	108	240

The number of Bills of Sale published in England and Wales for the week ending April 11 was 201. The number in the corresponding week of last year was 219, showing a decrease of 18, being a net decrease in 1885, to date, of 50. The number published in Ireland for the same week was 7. The number in the corresponding week of last year was 8, showing an increase of 2, being a net decrease in 1885, to date, of 20.—*Kew's Mercantile Gazette.*

Registration of New Companies.

The following joint-stock companies have been duly registered:—

NORTHFLEET AND SWANSCOMBE BRICKFIELDS COMPANY.—Capital 30,000*l.*, in shares of 5*l.* For the acquisition of all the estate and interest of Hugh Barber and others in or to the clay, sand, and other stones, mines, &c., upon the lands known as the North Kent Brickfields, situate in Swanscombe, Co. Kent, and all the plant, &c. The subscribers (who take one share each) are—C. E. N. Audain, Lancaster-road, W.; H. Peter Bernard, Croydon-road, Anerley; R. T. Linford, Markham-square, Chelsea; W. Whieldon, Devonshire Chambers, E.C.; F. Davies, 28, Martin-lane; E. H. Armstrong, 27, King-street; W. Hammond, Landels-road, East Dulwich.

ANGLO-SPANISH MANUFACTURING AND COMMERCIAL COMPANY.—Capital 50,000*l.*, in shares of 10*l.* For the purchase, sale, and delivery of manufactured goods and produce of England and Spain in such place as will be determined on. The subscribers (who take one share each) are—R. de Herrera, Barcelona; A. Soler, Barcelona; Pedro Rocabert, Barcelona; A. Carreras, Barcelona; J. Sune, Pasaje Mulet, Barcelona; L. Muri y Battle, C. de Trafalgar, Barcelona; J. Jové, C. de Carpe, Barcelona.

NEWHALL FIELD COLLIERY COMPANY.—Capital 10,000*l.*, in shares of 10*l.* To carry into effect an agreement made between B. Cartwright and Roderick Mackay, for the acquisition of a certain lease of the Newhall Field Colliery, at Swadlincote, county Derby, with the machinery and plant, and carry on the same. The subscribers (who take one share each) are—P. Mackay, 3, Lothbury, E.C.; Ed. Boyle, Clement-lane; P. Pocher, 10, York Gate; J. Garden, Ruskin-road, Tottenham; W. H. Walker, Aldborough, Darlington; J. B. Gampling, Whitehall House, Tottenham; N. G. Pater-son, West Green-road, Tottenham.

NACUPAI GOLD MINING COMPANY.—Capital 610,000*l.*, in shares of 1*l.* To carry into effect an agreement to purchase the old company from the liquidators, and to carry on the general business of miners, smelters, &c. The subscribers (who take one share each) are—P. J. Rodocanady, South Sea House; M. G. Schilz, 50, Cleveland-square; C. Clow, Royal Exchange Buildings; S. Allgecasto, 19, Great Winchester-street; M. Van Roach, Royal Exchange Buildings; J. M. Kalneskey, Cleveland Gardens; J. C. F. Lee, 9, Park Crescent, Portland-place.

LAKE SUPERIOR GLASS AND MIRROR MANUFACTURING COMPANY.—Capital 250,000*l.*, in shares of 1*l.* To carry on the business of glass and mirror manufacturers in all its branches, and to purchase, lease, or otherwise, in the Empire of Russia and elsewhere, timber, forests, &c. The subscribers (who take one share each) are—James Milno, Newman-court; E. Whitman, 74, Cornhill; J. D. Hill, Bethune-road, Stoke Newington; H. W. Adams, Queen's-court, Haverstock Hill; Geo. Butler, Guildford-street; R. Looser, Wilber-force-road, Finsbury Park; A. Rogers, Enderfield-road, E.

THE VALTA ELECTRICAL COMPANY.—Capital 50,000*l.*, in shares of 1*l.* To acquire by purchase the business and property of F. D'A. Gould, of Manchester, including all patents, licenses relating to electrical apparatus, and all contracts, and to carry on such business, also to manufacture and supply all motors, generators, lamps, materials, &c. The subscribers (who take one share each) are—C. M. Nesbitt, Market-street; H. Lindley, 16, South-grove, Brooklands; Thomas Browett, Victoria-court, Leeds; F. D'A. Gould, Arcade Chambers; C. G. Taylor, Arcade Chambers; A. Simmons, Brom-street; E. Guthrie, Brom-street.

GWERN-Y-MYNYDD LEAD COMPANY.—Capital 50,000*l.*, in shares of 1*l.* To acquire the property and assets of Gwern-y-Mynydd (Limited) on the terms of an agreement made between William J. Lavington, the liquidator, and James Nicholls, also to acquire any other mines, and to develop, open up, and work any properties of the company. The subscribers (who take one share each) are—George R. Hearn, Beulah Villas, South Norwood; M. F. Dormer, Fernlea-road, Balham, S.W.; C. C. Baker, Austin Friars; C. T. Chevallier, Crown-court, E.C.; J. G. Oates, Mowbray-road, N.W.; George J. Nicholls, Portnall-road, St. Peter's Park; William H. Foy, 58, Union-road, Clapham.

THE AUTOMATIC RETORT COMPANY.—Capital 50,000*l.*, in 5*l.* shares. To purchase letters patent granted to B. P. Walker and J. A. B. Bennett, and to W. A. Byron and J. A. B. Bennett, for improvements in apparatus used for and connected with the distillation of coal, shale, &c., for Great Britain, France, and Belgium, and to carry on the business of oil distillers and refiners. The subscribers (who take one share each) are—J. Hebben, Crescent-street, Lower Sundenham; William C. Cross, Beaconsfield-road, Tottenham; Charles William Bersey, Hartington-road, S.W.; Thomas E. Smith, Bedford Hill, Balham; John D. Rogle, Holford-square, W.C.; J. Mundy, Colfe-road, Forest Hill; W. F. Brown, Gayhurst-road, Dalston.

LAKE SUPERIOR COPPER COMPANY.—Capital 120,000*l.*, in 1*l.* shares. To acquire by purchase the mineral tracts of Cape Manitowish, situate on the east shore of Lake Superior, and containing 7254 acres or thereabouts, the property of the Lake Superior Native Copper Company (Limited) in liquidation, and to acquire other lands, mines, &c., in British possessions in North America. The subscribers (who take one share each) are—E. Littlewood, Cavendish-road, Brondesbury; P. Sloper, King William-street, E.C.; E. E. Probert, 24, Lloyd-square, W.C.; L. B. Combie, Abchurch Chambers, E.C.; W. C. Lewis, New Hampton; James H. Nicholls, Cumberland Park, Willesden; Geo. Good, 90, Osborne-road, Forest Gate.

THE GOLDEN CLAIMS.—Capital 30,000*l.*, in shares of 10*l.* To purchase, take on hire or lease the 41 claims in the Dutoitspan Mine, situate at Dutoitspan, Griqualand West, South Africa, and the right to dig and search for diamonds and precious stones, and to purchase any other mining claims in South Africa. The subscribers (who take one share each) are—F. S. Cooker, Gray's Inn; F. D. Dime, 19, Coleman-street, E.C.; John W. Anderson, 2, Suffolk-lane; Colonel F. G. Stewart, 14, St. James's-square; W. L. Horokukin, Eaton Rise, Ealing; C. W. Cripps, Crews-road, Peckham; and George F. Newburn, Elm Park Gardens.

THOMPSON'S ELECTRICAL FITTING SCREW CUTTING COMPANY.—Capital 30,000*l.*, in shares of 1*l.* To carry on the business of makers of electrical fittings and screw and brass work, also to purchase and carry on the business carried on by Messrs. Thompson and Raw, Tormill-street, and to extend the same. The subscribers (who take one share each) are—G. A. H. Croft, Boraybridge, Yorks; E. F. Thompson, St. James's-terrace, Regent-road; G. E. Thompson, St. James's-terrace; N. Crumpton, 23, Porchester Gardens; N. G. Thompson, 4, Queen Victoria-street; H. J. Dowling, 42, Victoria-street; and G. H. Raw, 4, Queen Victoria-street.

CLEVELAND INSTITUTION OF ENGINEERS.—On Saturday afternoon, by invitation of Mr. R. H. Appleton, a number of the members of the Cleveland Institution of Engineers paid a visit to the Cleveland Flour Mills, South Stockton. The visit was in connection with a paper recently read before the institution by Mr. H. Macdonnell, in order that the members might have an opportunity of witnessing the gradual reduction system of manufacturing flour by chilled iron rolls in full operation. The process was fully described by Mr. Appleton and Mr. Macdonnell. In reply to several questions it was stated that the old system of milling by stones had only been replaced by the modern system during the last four or five years, and besides the larger percentage of flour obtained a great saving was effected in the cost of manufacture. From 5000 to 6000 sacks of flour per week were now manufactured at the Cleveland Mills, as compared with 1500 and 2000 sacks a few years ago. Mr. Appleton considered that English millers in future would only be able to compete successfully with Continental millers, owing to the low price at which they could obtain their wheat, by adopting the most improved processes, and manufacturing on an extensive scale.

Meetings of Public Companies.

YEOLAND CONSOLS.

On Saturday afternoon an interesting event occurred in the history of this mine, which is situated near Yelverton station, between Plymouth and Tavistock. The water-power is excellent, but its utilisation for the purposes of the mine has not been satisfactory to the directors. They, therefore, consulted Mr. S. Richards, C.E., of London, who advised the erection of the Little Giant duplex turbine, which he believed would answer all the conditions required of it. Accordingly the wheel has been erected, and on Saturday the ceremony of starting it was performed, under the personal superintendence of Mr. S. Richards. Much interest was manifested in the proceedings, several practical men being present who were desirous of judging for themselves as to the advantages of the turbine, in order to adopt it if found satisfactory. The fall of water was about 50 ft., the wheel 14 in. diameter, equal to 80-horse power. At two o'clock the water was turned on, and in less than a minute off went the wheel, lifting its ponderous load of 28 heads of stamps, axles, gearing, &c., with the greatest ease. It worked admirably, amid the cheering of the assembled miners, and was pronounced by all to be most successful. The party then adjourned to the account-house, where Capt. MANLEY presided, and Capt. BEER in the vice-chair.

Mr. S. RICHARDS being called on, remarked that their coming there that day to witness the starting of the turbine gave him much pleasure, and he trusted they were as well satisfied with it from what they had seen of its working as he was himself. It was a machine he had taken a great fancy to, being, in his opinion, the best of all those yet tried, and far superior to any water-wheel. There were 5000 of them working in America, and such a number would never have been erected but for their superiority. They were now being introduced into England, but only during the last three years, and there were about nine of them now working, and giving much satisfaction. One he saw last November at some flour-mills in Dorset was doing all the duty they claimed for it. It does half as much again as the old water-wheel which it has replaced, and the owner told him it had then been working nine months, and he could only express his satisfaction by saying he was more than pleased with it. It was a 16 in. wheel, with 16 ft. water fall, equal to 18-horse power. The Little Giant was admirably suited for saw-mills, flour-mills, and factories, but they did not object to their doing such work as stamping, as they had witnessed that day. From enquiry he had found that Yeoland Consols was not so generally known as he had imagined, and it might be asked, what was the turbine erected there for? In short, it might be stated simply for the purpose of reducing the tinstuff from the lode for drawing the ore from deeper parts of the mine when developed, pumping water, and any other purpose required as a water-wheel, or steam-engine would do. While speaking of the mine, he would say that the present workings were on a very extraordinary large lode, 50 ft. wide, and in this respect would compare with such mines as the celebrated Devon Great Consols, Old Wheal Friendship, and Wheal Crebor in Devon, Dolcoath, the Crinnis Mines, and other large mines in Cornwall. These might be termed Nature's rare productions, and from the large amount of very fine gossan, and otherwise, very favourable composition with tin disseminated throughout a large portion of it. He ventured to say that this lode if well developed was very likely to compare favourably in productiveness with the mines he had just mentioned, and would, of course, cause a stimulus and a revival of the good old times not only in that very spot, but also in the town and neighbourhood of Tavistock. (Applause.)

Mr. ARTHURS, as a practical man, said that he thought it was but justice to the Giant turbine to say that it was a marvel and a wonder, doing amazing work. According to the water passing through the wheel, so far as he could see it would give every satisfaction, and was worthy of recommendation, and he believed it would ultimately supersede the overshot wheel. It would do more work with same water-power, and in same position, and relatively the cost was in favour of the turbine.

Capt. MANLEY said that in certain work nothing would beat the turbine, which would do all that was required of it. With reference to the prospect of the mine, he might say that he had stronger faith in it than ever, if properly developed. As far as opened the lode was 50 ft. wide. There were seven or eight lodes in the sett, some being equal in promise to the present lode. He believed this district would yet be the Camborne of Devon if landlords were liberal. The great feature of the district was the junction of the granite and killas, and so far as their own mine was concerned, there was ample water-power for any amount of work.

Capt. BEER, as an old tin dresser, remarked that when he first saw Yeoland Consols about two years since he expressed his belief that it was one of the best districts of Devon or Cornwall. The mines in Camborne had copper on the back of their lodes when first started. This neighbourhood had never been tried, they had not gone deep enough. Their lode was now a good productive one for tin, averaging 28 lbs. to the ton of stuff. Dolcoath would not average above 16 lbs. As to the turbine, he believed it was the best water-wheel with the same quantity of water.

Mr. WORSLEDGE, in the course of some interesting remarks, said that the present turbine with gearing would cost about 150*l.*, as against 500*l.* for a water-wheel.

The men were afterwards entertained at a substantial dinner at the Buller's Arms.

PEDN-AN-DREA.

A meeting of shareholders in this mine was held yesterday (Friday) week, Mr. R. S. TEAGUE (the purser) presiding.

Labour costs for 16 weeks were 1628*l.* 11*s.*; merchants' bills for three months, 1025*l.* 3*s.*; rents, 139*l.* 15*s.*. The total costs were 2996*l.* 12*s.*; tin sales, 39 tons 5 cwt. 1 qr. 26 lbs., realised 1726*l.* 14*s.*. A loss was shown of 1161*l.* 5*s.*, bringing the debit balance to 1548*l.* 6*s.*. The report of the agents stated that since the last meeting the 100 west had been extended 14 fms. 3 ft. The lode was 5 ft. wide, and worth 15*l.* per fathom. The 100 east had been extended 6 fms. 3 ft. The lode for the last 3 fms. in driving had been unproductive, and the end was poor. They were pleased to say they were making good progress in forking the mine. The water was now drained to the 120 in Bain's engine-shaft, and they hoped to have the mine drained to the 140 in about two months, when, if not before, they expected to find some good tribute ground on the south lodes available for stopping. This would greatly assist them in their returns, and put them in a better position. Bain's skip shaft had been cleared, cut down, and secured 15 fms. below the 100, and they were at present busily engaged in putting down the skip road, which would be completed this week. The lode for the last 6 fms. in sinking had greatly improved, was worth 10*l.* per fm., and presented a most promising appearance. They considered this proved well for the western ground. They regretted the falling off in their returns of tin during the first 16 weeks; this could be accounted for owing to the 100 end east becoming poor. They had made an estimate of the cost incurred in the draining of the mine, and which cost at least 160*l.* per month.

The accounts were adopted, and on the motion of Mr. VIVIAN and Colonel FLUDYER a call of 9*s.* per share was made.

Colonel FLUDYER remarked that he had personally inspected the mine underground. He had found that the 100 east and the cross-cut north from 100 east of Bain's shaft were suspended. "In the former—that was the 100 east, I believe," the colonel proceeded, "the lode is split. I drilled this level; there are two east ends. In the southern end there is certainly no lode, but in the northern there is to-day stuff and water coming. It appears to me that the lode is just beginning to form again at this point. The cross-cut north from 100 ft. of Bain's shaft has been driven a few feet beyond the line where the lode ought to be, had it kept its bearing; but I am very strongly of opinion that the lode is the one further north by the granite, which has come in from the south. I would most strongly advise the resumption of both these ends by four men at least in

each. The cost would be trifling in comparison with the heavy standing charges, and there is a probability, which amounts in my mind to almost a certainty, that good discoveries will result from such a course in both places. The 100 east as well as the 100 west has been very productive, and it is not the least likely that such a strong lode has disappeared. If it turn out that this branch going away (with a more northerly bearing) is the main part of the lode it will show that it is still a good bit north of the 100 cross-cut end east of Bain's shaft. A call of 9*d.* per share would drive both these ends for four months, if no tin at all (a most improbable contingency) was met with. I would remind you that at present we are keeping a 70-inch engine going and paying heavy standing charges, and we are not laying open ground in proportion. By finding where the lode is at the 100 we shall have a guide for the 120 fm. level, which will be shortly started."

Mr. VIVIAN enquired of the agents if they would not have what Colonel Fludyer was aiming at in meeting with the granite in the 120.—The question was answered in the affirmative.

Colonel FLUDYER replied that difficulties might arise in the way of water, and they might prove the lode at the 100 in the meantime.

The suggestions of Colonel Fludyer were accepted so far as the second point mentioned by him is concerned.

In the course of discussion it was agreed by the shareholders that the prospects of the shaft were very favourable.

SOUTH CONDURROW MINE.

A general meeting of shareholders was held at the offices of the company, Great St. Helen's, on Wednesday.

Mr. H. J. MARSHALL presiding.

Mr. EDWIN F. COLMER (the secretary) read the notice calling the meeting.

The following is the report of the agents:—

April 14.—In reporting on the underground operations since your last general meeting we have not been able to sink Pendarves's shaft owing to the water; we are, however, driving the levels west of Marshall's towards it, and hope soon to drain it. The 52 end west has lately improved; the lode is worth 8*l.* per fathom, and the price for driving is 2*l.* 5*s.* per fathom. The lode in the 66 end west carries stones of copper and tin. The 93 end, west of Marshall's, is extended 100 fms.; the lode is unproductive. It has been in connection with an elvan dyke for a good many fathoms. We have patches of granite intermixed with the elvan, and we hope soon to enter more settled ground, where we trust the lode will improve. The 93, east of King's shaft, on the flat lode, is worth 12*l.* per fathom. The 80 end driving east towards West Frances is worth 10*l.* per fathom, and looks likely to improve. The slope below this level is worth 10*l.* per fathom, and the rise in the back is worth 9*l.* per fathom. We hope to hole the rise to the winze below the 70 in a few days; when this is accomplished it will give good ventilation, and open out profitable ground for stopping. The rise in the back of the 80, west of Plantation, has recently been communicated with the 70; the driving of the 80 has been resumed, the lode in the end is worth 10*l.* per fathom. The 70 end, east of King's, is worth 10*l.* per fathom. The winze below this level it worth 10*l.* per fathom; the slope in the back is worth 8*l.* per fathom. The 60 end east is worth 6*l.* per fathom; we have holed the rise in the back of this level to the winze below the 50; this has opened ground for stopping worth 10*l.* per fm. The 50 fm. level end east is in a strong kindly lode worth 9*l.* per fathom. Two stops in the back of the 50 fm. level are worth 10*l.* and 12*l.* per fathom, respectively; a rise in the back of this level is worth 8*l.* per fathom. The 40 fm. end, east of engine-shaft, is worth 7*l.* per fathom. The winze sinking below this level is worth 10*l.* per fathom. The slope in the back is worth 12*l.* per fathom. The lode in the back of the 40 west is worth 8*l.* per fathom. We regret the price of tin is still very low, and that our levels west of Marshall's have been unproductive for some time past, but there are good indications of a speedy improvement in this part of the mine. The 52 end west has recently improved, and there are strong reasons for hoping that the levels below will soon become more productive. We have a great extent of entirely unexplored ground before us both east and west, and we are keeping on a great deal of tutwork in opening out levels east and west on the course of the lodes, as well as in sinking winzes and rising in the backs of the respective levels with the view of making fresh discoveries.—WILLIAM RICH, H. KING, WILLIAM WILLIAMS.

The CHAIRMAN proposed that the accounts and the agents' report be received and passed, and a copy sent to each shareholder.—Mr. CHARLES CLARK seconded the motion, which was carried.

The CHAIRMAN said there had been an important discovery of tin on their eastern boundary by West Frances, which had done this unprecedented in mining annals, that was to say, it had risen 160 fms. from a level, a long way from the shaft, upon a very rich bunch of ore just in their eastern extreme. They were now sinking a shaft to meet that. Wheal Grenville had, within the last three weeks, cut its 150 in rich ore under the level, and there was reason to believe that the same bunch of ore extended in the direction of this property. Most of the bunches of ore were perpendicular, and ran in pipes. They had a fair chance of cutting a rich bunch of ore in the eastern extremity of their sett. Wheal Grenville had lately cut its ends rich on the flat lode, which looked promising for the South Condurrow eastern ground.

Capt. RICH: We have good ends in the western ground.

The CHAIRMAN went on to say that these were encouraging features. They had a large extent of ground. The flat lode underlain the Grenville lode. The quantity of tin raised during the four months was 147 tons against 163 last year. Last year they got the tin from the western ground, where there was a rich shoot of ore by the cross-course in the 78, east of Marshall's shaft, which they missed now. The price had been bad; and, although rather better by 11*s.* per ton, on the average, than they received during the last quarter, it was 4*l.* per ton worse than they received in the corresponding quarter of last year. The balance in hand was 3147*l.* 15*s.* 3*d.*, which the directors considered would admit of the declaration of 3*s.* per share, which would absorb 918*l.* 9*s.*, leaving 2229*l.* 6*s.* 3*d.* to carry forward, as compared with 2362*l.* 3*s.* 9*d.* brought into the accounts. He thought everyone would consider their cost of returning tin low; it had been 38*l.* 2*s.* 2*d.* They had, it was true, had it lower before, but, on the other hand, they had had it higher; and, with a rise in the markets, returning tin at that price they might have far more satisfactory results. He proposed a dividend of 3*s.* per share, payable forthwith.

Mr. BORROW (a shareholder) asked the terms of the lease?

Capt. RICH: We are paying 1-24*d.* dues.

Mr. BORROW: I suppose there is no fear of a fine?

Capt. RICH: No; we have one of the best landlords in England.

Capt. RICH seconded the motion, which was carried, and a vote of thanks having been passed to the Chairman, the proceedings terminated.

AMERICAN PRODUCTION OF BESSEMER STEEL IN 1884.—The figures published by the American Iron and Steel Association show that the total production of Bessemer steel ingots in the United States in 1884 was 1,538,355 tons, as compared with 1,654,627 tons in 1883, and 1,696,450 tons in 1882. Of this quantity Pennsylvania alone produced 1,029,244 tons in 1884, Illinois following with 339,068 tons. There were 21 Bessemer steel plants completed, and one building, in the United States in 1884. West Virginia and Massachusetts made their first steel last year. The total American production of Bessemer steel rails in 1884 was 1,116,041 tons. Of open hearth steel only 3000 tons were made; the quantity of iron rails manufactured was 21,891 tons. As compared with the production of Bessemer steel rails in 1883 (1,286,554 tons) the figures for 1884 show a falling off of 13 per cent., but as compared with 1882 when the maximum steel rail production (1,438,165) was reached in the United States, there was a falling off of 22 per cent.

OREGUM GOLD MINING COMPANY OF INDIA
(LIMITED).

An extraordinary general meeting of shareholders was held at the offices of the company, George-street, Mansion House, on Monday, to consider and if approved passing certain resolutions for taking the company out of liquidation, and raising fresh capital.

The chair was occupied by Mr. MALCOLM LOW, J.P., D.L., who read the notice calling the meeting.

The CHAIRMAN said—Gentlemen, you will recollect that our last general meeting was held directly we were advised that, in our particular case, it would be a safer and better course to reinvigorate ourselves by the resuscitation of the present company rather than by forming a new company as we had first of all intended; but it will also be within your recollection that at that general meeting which was held on the 30th December last we passed unanimously a series of resolutions, which resolutions were designed to have the effect of taking us conditionally out of liquidation direct; they should be sanctioned by the High Court of Justice. Since then these resolutions have been approved by our creditors. This was done at a special meeting of creditors held on the 11th of February last. And finally, I am glad to say that these resolutions have been approved by the Court, and an order has been passed permitting us forthwith to go out of liquidation, and resume active operations, conditionally on the payment of our debts. As regards our financial position we are, roughly, 80,000l. in debt. I have the full details here compiled by the receiver, and they come exactly to 77,997l. 5s. 5d., so we may take it roughly at 80,000l. The directors think it will not be safe to start this concern with much less than 20,000l. clear. We have very considerable responsibility in this matter, and we (if I may so characterise it) intend not only to take the coach out of the stable yard, but must see how we are to drive it when it comes out, and therefore we have to be particular about this matter of finance, and we do not think we should start the concern on less than 20,000l. (Hear, hear.) I may say that in this view we are fortified by the opinion of a very eminent expert—Mr. John Taylor—who, you will be glad to hear, has accepted the post of general manager of this company. (Hear, hear.) Mr. John Taylor is an expert of eminence whom we all acknowledge. He is here to-day himself, and has promised very kindly to give us a few observations upon the general prospects of these gold fields. With regard to the state of the mine itself, I shall not weary you with a recapitulation of the list of the machinery, buildings, depths of shafts, and so on, which we have discussed at former meetings, and which you are all extremely well aware of. The main shaft is down to a depth of 100 ft., and the Munday shaft 120 feet. In the Munday shaft two years ago, when we suspended operations for want of funds, we were beginning to get gold, and had got it in some considerable quantity. The 20 heads of stamps and the power for driving the same are on the spot, and all we want to purchase is some new pumping machinery. With respect to the prospects of the future I have a plan here to show you how the four best known properties of this field are topographically related to each other. This (pointing to the plan) is the north, and this is the south. We have north the Nundydroog Company, which was in the same position as ourselves with respect to the suspension of work; but I am happy to say that they have obtained ample funds to resume operations, and have already done so. The Oregum property comes next between the Nundydroog and the Mysore, the Mysore being to the south of the Oregum. The recent successes of the Mysore Company, and the admirable prospects of that undertaking are no doubt known to you all. (Hear, hear.) Finally, we have the Colar block, which I am happy to say has been purchased by the Indian Consolidated Gold Company, which has ample funds for the development of this property, and not only to develop it, but to develop it with all speed; so that if we succeed in restarting this undertaking we shall form one of this group of the four, and I hope and think these four are destined to have an extremely prosperous career. (Hear, hear.) Before I sit down I will say a few words upon our scheme for raising funds, and I cannot do better than reiterate to-day what we have stated in the circular accompanying the notice calling the meeting. We there say that our objects are:—1. To provide an amount of working capital sufficient, after payment of the company's debts, to effect a satisfactory and workmanlike development of the property. 2. To make the terms of subscription to the new issue attractive to the present shareholders, and to give to every shareholder the opportunity of retaining his entire interest in the property. 3. To let those shareholders who may decline to subscribe for these fresh funds retain such portion of their present interest as may be consistent with the possibility of inducing others to do for them what they decline to do for themselves. Now, gentlemen, I think it will be candidly admitted on an examination of this scheme—which no doubt you have all carefully read, and which it would therefore be needless to go into now—no doubt it will be admitted that these objects are fulfilled by this scheme. No shareholder need part with his interest. Everyone is invited to subscribe. No outsider will be gone to until the list of the present shareholders is exhausted; therefore we have only to look to ourselves to help ourselves and to take part in the undertaking for our own benefit. (Hear, hear.) As regards those shareholders who may decline to participate in this new issue it will be seen that the present ordinary shares participate equally in all profits with the new preference shares—in all profits in any one year above the sum of 12,000l. I hope we shall pass this scheme to-day unanimously. I shall be happy to answer any questions which you may put to me; and I have only to say before sitting down, and before moving the resolutions, that I particularly urge upon the shareholders to come forward and do their part in subscribing to this fresh fund. (Hear, hear.) The Chairman then formally moved the following resolutions:—

1.—That the directors be and they are hereby authorised, in pursuance of any contract duly filed with the Registrar of Joint-stock Companies, to issue shares in any additional capital, to be deemed fully or partly paid up, and may make such contract and issue such shares (credited as paid up to an extent not exceeding 15s. per share) as part of the terms of the issue thereof, and without any other consideration than the agreement of the person taking the same to pay the unpaid up part thereof (not being less than 5s. per share) in cash.

2.—That the capital of the company be increased by the issue of 120,000 preference shares of 1l. each, to be credited in the capital and books of the company as having the sum of 15s. per share paid thereon, such preference shares carrying rights as follows:—

(a) To a non-cumulative preference dividend up to 10 per cent. on the nominal amount of such preference capital out of the profits of the undertaking each year.

(b) To equal participation (share per share) with the ordinary shares in such further profits as shall remain for distribution each year after payment of the above 10 per cent. preference dividend.

3.—That the directors be and they are hereby authorised

(1) To offer the said preference shares in the first instance, and subject to acceptance within a time to be fixed by the directors, to the existing members of the company who have registered addresses in the United Kingdom, and whose shares are fully paid, and (in the event of over-subscription) to allot the said preference shares rateably or as near thereto as circumstances, in the opinion of the directors, will admit, among such existing members of the company, being applicants, in proportion to the amount of their existing holdings.

(2) To dispose of any of such said preference shares as may remain unapplied for by existing members of the company as above, in such manner, on such terms, and to such persons as shall to the directors seem fit in the interests of the company.

Mr. W. G. PROBYN seconded the motion.

The CHAIRMAN said he was sure the shareholders would like to hear a few words from Mr. John Taylor. (Hear, hear.)

Mr. JOHN TAYLOR: Gentlemen, I am not here, as you are aware, in any official capacity. I hope the next time I stand up before you I may be in an official position. (Hear, hear.) Various considerations have urged me to desire, for some time past, to have some position in connection with this company, and the strongest of all is a letter which I hold in my hand from Capt. Plummer. Mining matters must carry with them certain risks, but I have sought always to ascertain to the best of my ability what the prospects of the concerns are with which I become identified. (Hear, hear.) I think perhaps I may say that I am in a position to obtain better

information with regard to the prospects of your mine than anybody else. I have spoken at meetings of the other two Indian gold mining companies with which I am connected (the Mysore and the Nundydroog) of our knowledge of Capt. Plummer, and how he has been agent of our firm, more especially under my father, for a great number of years. We have the very highest opinion of him, not only in his capacity as a mining engineer, but as a man having a general knowledge of commercial affairs. Capt. Plummer's knowledge of all mining matters is very large. Well, I wrote to him with respect to my deep interest in Oregum, and in consequence of questions I asked him some months ago he has written to me, and he speaks very strongly of the value of this property on the Colar gold field; and from the opinion he gives, and from the conclusions I have drawn for some months not to say years past, I cannot help being perfectly convinced that we have a great future before us in that field. We may of course all make mistakes, but that is my opinion, and has been so through good repute and evil repute. I have stood up for these properties as presenting splendid prospects, and I believe these anticipations will be fully and thoroughly realised in a very short time. (Hear, hear.) There is another strong reason, independent of the advantage of being connected with this company, and that is, I think that great benefit will be derived from their being but one control of the three properties in question, which your Chairman has pointed out. The fourth property—the Colar property—I am not able to speak of; I have personally no knowledge of it, but I feel, seeing that the Mysore property is giving good results, and that the Oregum property lies between that property and Nundydroog, that there would be great advantages to all if the control were in some way in the same hands both here and in India. (Hear, hear.) We find that when the mines were working, before the first rush to the district commenced, various difficulties arose; I believe that by arrangement between the three companies as to certain matters, such as the water supply, the fuel—another very important matter—the engagement of native labour, the sanitary condition of the natives in the different camps which are scattered at certain points upon the line of the gold reefs, and must largely increase in number and extent as the mines are more extensively worked, and arrangements have to be made for the medical attendance of these people, I believe all these matters can be very much better conducted or controlled, and also much more economically if the companies were in some way associated one with the other. (Cheers.) Capt. Plummer has had the management of the Nundydroog and Mysore affairs for some time past. The opinions of Capt. Plummer as to the Nundydroog have been published, and it is a long time since he first expressed the strong opinion he did with respect to the Nundydroog property. He told us some months before operations were discontinued that the property was going to turn out a great success, and was deeply grieved that the mine had to stop when it did. It stopped solely for want of funds. It was not that we had not the greatest encouragement to continue, but we were not able to raise enough gold to meet expenses, and we had not enough funds, and we had to stop. We have now gone to work again, provided with 15,000l. or 16,000l. of capital, and I hope before long we shall receive from these reports of what is being done. Anything which Capt. Plummer may have said some time ago has been more than verified by what has taken place on the Mysore Company's property. We have there a most magnificent discovery. It is not of any great extent at present, but it is exceedingly good. The history of this gold field is I think a very remarkable one. I am afraid to say how many mines were working there three years ago; they all stopped one after the other, and practically it came in the end to this—that there is only one working there at all—the Mysore, and that is working in one place. We must not get away from the fact which I have always before me that here in this one small place, although the old workings extend for miles, and are easily traceable, and the Chairman has seen them, these old workings have been unbottomed with the result that the further we go below that point the richer it seems to get. As you will have seen by the *Mining Journal*, the lode was 5 ft. wide, worth 6 ozs. 15 dwts. of gold to the ton, and I do not know of any other mine where you can point to the same results at such a shallow depth from surface. Therefore I think all that is required with regard to your property is to sink deeper, and get below the old workings, and my own belief is that you will have equally good results as with the Mysore. (Cheers.) The Chairman has said that the amount of capital asked for is an ample amount; I do not wish to define any precise figure, but you should provide yourselves with an ample amount of working capital; that being done, and operations continued under the old workings, I think your success will be assured. (Cheers.)

Mr. ST. STEPHENS, F.C.S., said that having been on the Colar gold field he was able to testify to the truth of the various statements which Mr. Taylor had made. Indeed, Mr. Taylor might have gone a little further with regard to Oregum. Mr. Taylor was quite right in saying that in Mysore everything had been left alone except at one place, and there they had met with the greatest success. Those who had been on the field had anticipated it would be so, and had never swerved from their belief that Mysore would turn out well. As regarded Taylor's shaft, on the Mysore property, for years past those who knew the property said it was the very place where, in that portion of the district, they would meet eventually with great success. But in Oregum they had something better, for they had there three distinct lodes, and on each lode there was a shaft, and each shaft had been sunk so deep that at present each was on the lode. At one point—the east shaft—they were only down 90 ft. He was sorry the works that should have been carried out there were not carried out; if they had been Oregum would now be like Mysore. If they had gone 20 or 30 ft. deeper they would have got the lode 17 ft. wide. At the Battery shaft he saw the lode, and it was 5 ft. wide, carrying gold, and he took from the lode specimens which were worth a great many dwts. per ton, and the lode was still going down. The incline was down about 100 ft. As regarded the Munday lode they had had observations regarding that from the Chairman; but the Chairman might further have stated that the plates were not used for a long time, and a great deal of gold went off in the slimes, and therefore in estimating the returns from that place they must take into account the gold which should have been saved on the plates. Therefore they had not had the full value of the lode at Munday's shaft. He had had a question asked him whether these lodes were continuous, and whether he could state authoritatively if they ran from one property into the other, the same as some engineers had stated. He could state that they certainly did. From Ballaghat to Colar they did, and he had traced them 14 miles to the north. He believed there was a great future before this property if it was energetically worked. (Hear, hear.)

The resolutions were then put, and carried unanimously.

On the motion of Mr. KENSINGTON a vote of thanks was passed to the Chairman, and the meeting broke up.

NOBEL'S EXPLOSIVES COMPANY.

The following report of the directors of Nobel's Explosives Company (Limited) has been issued:—In laying before the shareholders the abstract of the balance-sheet and of the profit and loss account of the company for the year ending December 31, 1884, the directors have to report as follows:—Manufacturing operations: The manufacture of dynamite, which was progressing very favourably at the company's Ardeer factory during the early portion of the past year, was interrupted in the month of May, through the occurrence of an explosion, which was attended, the directors regret to state, by considerable loss of life. The explosion occurred in one of the huts used in connection with the conversion of dynamite into cartridges, and there is reason to fear that it was caused through the carelessness of one of the female workers. It is satisfactory to note, however, that in an exhaustive report on the circumstances attending this distressing accident, Col. Ford, one of Her Majesty's Inspectors of Explosives, entirely exonerates the company from any blame in the matter, and speaks very highly of the general arrangements made at the Ardeer factory for the maintenance of good order and discipline, while for the safety of the workers the Inspector bears testimony

that every known precaution had been taken.—Cost of production: The cost of manufacturing nitro-glycerine, on account of a further fall in the price of the raw materials required in its production, has been less than during the preceding year. Nitric and sulphuric acids have been produced at less cost than during 1883, and fulminate of mercury and detonators at about the same cost.—Capital Expenditure: The capital expenditure during the past year has been as follows:—In connection with the Ardeer factory, 1706l. 12s. 11d.; ditto West quarter factory, 234l. 16s. 6d.; ditto, home and foreign magazines, 1244l. 16s. 9d.; ditto steamers and sailing vessels, 49l. 10s.; total, 3225l. 15s. 10d. And the following amounts have been written off: Renewals and repairs, 4824l. 9s. 10d.; Depreciation, 5895l. 19s. 6d.; total, 10,720l. 9s. 4d.—Blasting Gelatine: The manufacture of blasting gelatine has been carried on steadily since March, 1884, and supplies have been sent to most of the company's agencies at home and abroad; and although sufficient time had not elapsed by the end of the year for any considerable sales to have been effected in the foreign markets, the sales at home have been on a very fair scale.—Price convention agreement: The directors have much pleasure in making the announcement that an agreement was entered into between the principal dynamite companies on the Continent and this company in November last, by which all the parties have bound themselves to adhere to minimum selling prices in this and other countries in which any two of them may be represented. By this arrangement, which is intended to minimise the prejudicial effect of competition on the part of the most important European manufacturers of dynamite, the companies do not contemplate unduly raising prices, and under it they have established selling prices which are exceedingly moderate, and no higher than those which ruled little more than a twelvemonth ago, and were freely paid for the article. Although it was to be expected that the immediate effect of the arrangement would be to deter consumers from buying largely at enhanced prices, the directors confidently anticipate that this agreement, which is obviously for the advantage of all concerned, will be of permanent benefit, more especially when the mining and metal industries have recovered from their present depressed condition.—Debentures: During the year the directors, finding the company's credit balance in bank greater than was necessary for the exigencies of the business, offered to redeem the Six per Cent. Debentures to the extent of 30,000l., and they are glad to report that by the responses received they have been enabled to reduce the total sum by 23,000l.—Profit and Loss Account: After writing off the loss of 4492l. 16s. 6d., caused by the explosion at Kimberley, South Africa, and providing the sum of 6962l. 10s. 5d., wherewith to pay interest at the rate of 6 per cent. per annum on the debentures, the net profits for the year 1884, as shown by the profit and loss account, amount to 30,556l. 18s. 5d., to which falls to be added the balance from 1883, 5530l. 10s. 4d.; total 35,587l. 8s. 9d., out of which the directors recommend (1) that the sum of 30,000l. be appropriated to the payment of a dividend of 12½ per cent., free of income tax, and that the same be payable on May 1; (2) that the balance of 5587l. 8s. 9d. be carried forward to next year.

THE THARSIS SULPHUR AND COPPER COMPANY.

The following is the annual report for the year ended 31st of December, 1884. The same order has been followed as in the reports of previous years:—

Tharsis Mines.—The overburden removed during 1884 amounted to 239,104 cubic metres, as against 303,973 in 1883. The cost was 22,257l. 6s. 7d., as compared with 25,602l. 14s. 5d. The mineral extracted weighed 449,532 tons, as against 429,293—an increase of 20,239 tons, and was charged with 20,599l. 4s.

The fixed property accounts have all been carefully analysed and revalued. The additions represent the sum of 7232l. 7s. 10d., and the depreciation 11,043l. 5s. 11d.—a reduction of 3810l. 18s. 1d., leaving 136,293l. 7s. 7d. at the debit of works, buildings, machinery, and plant. The preparatory and investigation works during the year have again been on a large scale, involving an outlay of 14,816l. 7s. 6d., which, with the sum of 8000l. brought forward from 1883, leaves 22,816l. 7s. 6d. to be disposed of. As the future will be the principal gainer from this expenditure it has been agreed to spread it over three years; one-third of the whole, or 7605l. 9s. 2d. being debited to 1884, and the balance carried forward to be charged against the production of 1885 and 1886.

Calañas Mine.—The operations at Calañas are being extended in preparation for a much larger extraction of mineral in the future. The additions to property and plant required by the present development cost 23,572l. 3s. 9d., as compared with 3440l. 1s. 7d. The depreciations were 4062l. 7s. 3d., as against 2503l. 16s. 8d., being an increased debit of 19,509l. 16s. 6d., leaving a total net amount of 56,388l. 17s. 1d. in works, buildings, machinery, and plant. In the increase of this asset is included the sum of 10,683l. 19s. 5d. expended in the purchase of land for railway and mining purposes, and greatly adding to our water supply. It has been agreed to spread this purchase over a period of 10 years, and the sum of 1068l. 17s. 11d. is charged to the year 1884, the land itself beyond the above purposes being intrinsically of little value. The sum of 8440l. 12s. 10d. was spent in preparatory works and investigations, one-third of which (say) 2813l. 10s. 10d. has been charged to 1884, the balance to be borne by the two succeeding years. The ore raised in 1884 weighed 69,020 tons, as against 60,740 tons in 1883.

Waste Heaps.—These now represent 1,779,944 tons, and as formerly reported have been written down to the nominal value of 100l. During 1884 they yielded about 933 tons of copper, and will continue to give more or less profit for many years to come.

The total mineral raised from the Tharsis and Calañas mines during 1884 was 518,552 tons, against 490,033 tons in 1883—an increase of 28,519 tons. The supply of labour has been about an average, and the health of the people highly satisfactory, the death rate for 1884 having been only 16·29 per 1000 as compared with 20·66 in 1883, which was considered a low figure.

The sanitary and educational improvements of recent years, alluded to in former reports, have thus borne results of a gratifying nature.

The rainfall has again been above the average, and as 1885 has begun with an excess over last year we are not likely to suffer inconvenience in our copper-producing departments from a scarcity of water, the present supply being the largest we have ever had.

Railway and Piers.—These continue to be maintained in a state of thorough efficiency. The alterations on, and improvements of, the incline at San Bartolomé, completed a year ago, cost the sum of 9252l. 6s. 3d., and have been met by the 10,000l. laid aside for this purpose in 1879. The unexpended balance has been written back, and this item of 10,000l. now disappears from the debit side of the balance-sheet.

The shipments of pyrites were 191,484 tons of large, and 15,455 tons of small ore, together 206,939 tons, against 202,268 tons in 1883. Of precipitate 7095 tons were shipped, as compared with 6717 tons.

Metal Works.—The additions to plant and machinery at the various works have cost 5739l. 3s. 5d., and the depreciation has amounted to 9840l. 3s. 5d., being a reduction of 4101l., leaving a net total amount of 224,787l. 15s. at the debit of metal works property account. The additions have been principally in connection with the requirements for the increased silver and gold extraction at the different works, and the erection of two new condensers at Hebburn. All repairs have been charged to revenue as formerly. The works are in good condition, and well equipped for the enlarged operations of future years.

Pyrites, Copper, Iron Ore, &c.—The deliveries of pyrites during the year were about the same as for 1883, and the copper contents a little lower. There has been an increase in the production of copper, gold, and silver. In iron there was a small decrease. The value of copper and iron fell steadily during the year, and reached lower prices than have previously been known. Silver was also slightly lower.

Valuations.—The inventories of the whole of the company's property, including stocks and stores, have been made up with scrupulous attention to accuracy and value under the supervision of the directors and auditors, and may be regarded as safe and satisfactory. In addition to the other sums separately reported sundry items in the

inventories have been written off, amounting to 423l. 11s. 6d., and the sum of 4000l. has been set aside in readjustment of the foreign exchange account. The total amount written off of the profits of the year is 39,793l. 8s. 1d. The exceptional low values at the end of the year, when the stocks were taken, have materially lessened the year's profits.

Shares: French Company's Shares.—No change has taken place in these, none having been presented for exchange or redemption during the year. Tharsis Company's shares remain unaltered, there being still 37,670 shares unissued.

Debentures.—The total debenture debt of the company at last balance was 279,100l. On the 1st of February and the 1st of June, 1884, debentures for 219,100l. were paid off, leaving a balance of 60,000l., bearing interest at 4 per cent.

Balance Sheet.—The recent investigation into the whole of the company's assets in connection with the present balance led your directors to consider the propriety of now appropriating the reserve and sinking funds in further diminution of the amounts standing at the debit of some of the fixed property accounts. When so doing it was also considered expedient to alter the form of stating the balance-sheet, including a separation of the railway, rolling stock, and shipping piers accounts, and in this way to exhibit more clearly the total amounts now written off the various properties. The board accordingly unanimously resolved as follows:—

- 1.—To apply 10,000l. of the reserve fund in writing down the rolling stock of the railway.
- 2.—To apply 10,000l. of the reserve fund in writing down the shipping piers.
- 3.—To apply 10,000l. of the reserve fund in writing down the property and plant account in Spain.
- 4.—To apply 95,832l. 12s. 9d. of the reserve fund in extinguishing the overburden accounts.
- 5.—To apply the balance of 34,167l. 7s. 3d. of the reserve fund in writing down the railway, along with the whole of the sinking fund of 100,000l., which was set apart for that purpose.

The shareholders will thus be able to realise more intelligibly the result of the policy followed by your directors throughout, and which places the company in a strong position.

Profit and Loss Account.—The net profits for the year ended the 31st of December, 1884, together with the balance of 22,648l. 8s. 3d. brought forward from 1883, as shown by the profit and loss account, amount to 259,796l. 9s. 11d. The directors recommend (1) that the sum of 234,932l. be appropriated to the payment of a dividend of 8s. per share, equal to 20 per cent. on the paid-up capital of the company, free of income tax, the whole to be payable on or after Friday, the 8th day of May next; and (2) that the balance of 24,864l. 9s. 11d. be carried forward to the credit of the year 1885.

The dividend will be paid as follows:—

- 1.—To holders of nominative shares in Scotland by dividend warrants, payable at the head office and branches of the Union Bank of Scotland (Limited).
- 2.—To holders of nominative shares in England, Ireland, France, and the Continent generally by dividend warrants, payable at the Bank of Scotland, London.
- 3.—To holders of coupons of shares to bearer at the head office of the company in Glasgow. These coupons to be transmitted direct or through any banker. Five days are required for examination of the coupons. Payment will be made by cheque on a London bank.

Retiring Directors and Auditors.—The following directors retire at this time in accordance with the company's regulations:—Messrs. David Wilson, John Williamson, David Gamble, James Couper, and Charles Tennant. Mr. Wilson does not seek re-election owing to advancing years. The others are all eligible, and again offer their services to the shareholders, and the directors recommend that they be returned to the board. To fill up the vacancy caused by the retirement of Mr. Wilson, the directors are glad to say they have induced Mr. Hugh Brown, of Clairmont Gardens, Glasgow, to offer his services to the company; and the board cordially recommends his appointment. In parting with their late colleague, Mr. Wilson, the directors think it due to him to testify to the regular and faithful services he has rendered to the shareholders during the long period of 16 years. The directors state with much regret that their colleague, Mr. William Galbraith, desires to retire from the board owing to infirm health. The retiring auditors, Messrs. Mackenzie and Moore, again offer themselves for re-election.

THE SCOTTISH AUSTRALIAN MINING COMPANY (LIMITED).

The report and accounts, embracing the operations of the company for the six months ending on the 31st of December, 1884, are issued in anticipation of the meeting on the 24th inst. The company's sales of coal amounted to 136,130 tons for the half-year ending the 31st of December, last, and the net profit realised from the colliery during that period to 22,046l. 7s. 9d. The necessary disbursements for maintenance and renewal having been made. During the half-year under review the trade of the Newcastle Collieries has been well maintained, and this company's Lambton Colliery has experienced a steady and full demand for its produce. The price has remained at 11s. per ton. So far as the year now current has elapsed the trade has continued on about the same satisfactory scale as in the previous six months, the sales from the Lambton Colliery during January having been 18,122, and during February, up to the 23rd of that month, 18,484 tons, and it has been arranged that during the year 1885 the price shall remain unaltered. The colliery machinery, buildings, railway, and plant generally are reported to be in good order, and drainage and ventilation satisfactory.

The Cadia Properties.—The severe and long continued drought which prevailed in Australia throughout last year prevented the prosecution of much testing-work in gold mining or washing on these properties. The following is an extract from the report of Captain Josiah Holman, explaining the nature and results of the operations carried on during the six months ending at 31st December last:—“Cadia, 24th January, 1885.—The mining explorations made on this property in the past six months are as follows:—Sluice Claim, East Cadia: After having driven up the tail races two or three parties of men in succession gave this ground short trials, but not finding gold in paying quantity they soon left. Only 16 ozs. 17 dwts. 22 grs. of gold resulted from these trials.—Western Reefs: From these 37 tons of stone were crushed, giving the small yield of 5 ozs. 12 dwts. 2 grs. of gold.—Iron Duke: Gale and Sinclair further tested the alluvial here with poor results. They next tested a reef in this locality, from which a trial crushing of 16 tons yielded gross 3 ozs. 1 dwt. 13 grs. gold. More recently further small tests were made about the Iron Duke locality. From Owen's reef 45½ tons stone were crushed, giving an average yield of 2 dwts. 9 grs. gold. From Gale and Sinclair's reef 8 tons gave 3 dwts. 19 grs. gold per ton. Indications of the great iron lode were found in trenching at about 200 yards west of the Iron Duke, at a point where small patches of alluvial gold have been found, but further exploration is needed to open it up, to prove its continuity westerly.—East Cadia: Trathan's reef in the Sluice claim, was sunk to a depth of 45 ft., and 26 tons stone crushed for a gross yield of 2 ozs. 3 dwts. gold. Whilst the foregoing small tests in alluvial and reefing work have been somewhat discouraging, I hope the sluice works in the next water season will prove more prolific in gold, and the reefs referred to warrant further testing. The quantity of gold returned from works made in Cadia during the water season of the past year was 34 ozs. 18 dwts. 23 grs., which realised at the Colonial Mint 1115l. 1s. 4d., or 3l. 3s. per ounce. There were also crushed at Cadia, for other parties, 23 tons of stone, taken from the property lying outside of it, giving 20 ozs. 13 dwts. of gold.—Present Works: Two men are further testing the Sluice claim at East Cadia, and two men are driving a tunnel to test some known alluvial ground near the village of Cadia.” In a letter from Captain Holman, under date 15th February last, received by the last mail, he again writes as follows:—“Sluice Claim: This had been unoccupied for some time, until, about three weeks ago, John Perry took a portion of it in the north-east corner, and commenced to drive on the wash-dirt at bottom of a shaft near the tunnel, intending to get out wash-dirt till the water comes. However, on Thursday last he had the good fortune to strike his pick

against a 30 ozs. 3 dwts. nugget of gold, which is fully 8 in. long, and nearly free, or quite free, from stone.” This nugget was sold in the colony at 74s. per ounce. Captain Holman further reports that he had just lost two other portions of the Sluice claim, and that seven men were getting wash-dirt ready to be sluiced as soon as sufficient water should be available for the purpose. From the finding of such nuggets from time to time, and the fact that gold has been proved to exist in so many different places on the property, although not yet in large quantity, it would appear that there must be a source not far removed from whence the gold so met with has emanated, and which if it could be discovered might prove to be of much importance to the company, and to that discovery the attention of the board will continue to be directed.

The Late Manager, Mr. R. A. A. Morehead.—It is with deep regret that the board have to report the death, on the 9th of January last, of this gentleman. At the last meeting of shareholders it was mentioned that it had been found desirable to initiate some arrangement for relieving him of a good deal of the more active duties of management, and that it was proposed that he should retire at the beginning of the current year, being replaced by Mr. Archibald Shannon, the then sub-manager. The board had agreed with Mr. Morehead, subject to the approval of the shareholders at the ensuing meeting, that he should receive a retiring pension of 500l. a year for the remainder of his life, and should assume the position of “Consulting Inspector in Australia” to the company, for which, during his continuance in that office, a further sum of 100l. a year should be paid to him. Mr. Morehead's long colonial experience and close devotion to the company's affairs ever since its commencement in 1859, eminently fitted him for the new position which the board hoped he might long fill with advantage to the company. Unfortunately his death has occurred just as he had entered upon his well-earned retirement, and has set aside the plans designed for his comfort and benefit. The board feel very strongly that the services he has rendered entitle him to the gratitude of the shareholders, and they consider that, as the contemplated pension has lapsed, some token of the recognition of his services to the company should be given to those whom he leaves behind, and with that view they will submit a resolution to the ensuing meeting that the sum of 1500l. be presented to his two daughters out of the profits of the company about to be disposed of. Mr. Shannon, late the sub-manager, who takes Mr. Morehead's place, has been in the service of the company for 21 years, and Mr. Henry Frederick Chilcott, late the accountant and now the sub-manager of the company, has been 26 years in its service—that is to say, from its commencement. The board believe that both gentlemen are well fitted to fill the positions to which they have been promoted respectively.

Accounts—Dividend.—The accounts set forth the operations of the company during the six months ending at the 31st of December, 1884, and exhibit its position at that date.

The balance of profit shown by the general revenue account (including 3746l. 2s. 5d. brought forward from the previous account), is 25,671l. 14s. 2d.

The directors propose the payment of a dividend at the rate of 20 per cent. per annum on the paid-up capital of the company, 160,000l., free of income tax, which will require ... £16,000 0 0
To add to the reserve fund (which will then amount to 36,000l.) the sum of ... 3,000 0 0
To pay, as above suggested, to the late Mr. Morehead's two daughters ... 1,500 0 0
And to carry forward to next account ... 5,171 14 2
£25,671 14 2

It is proposed to make the dividend payable on Saturday, the 2nd of May next.

Election of Directors and Auditor.—The directors regret to have to state that in consequence of the illness of Alderman Sir Charles Whetham, which has prevented his attendance at the board for some time, his seat at the board, under the company's Articles of Association, has become vacant. They have appointed Mr. Richard Byam Otley, formerly an auditor of the company, a director in his place, who will retire and offer himself for re-election by the shareholders at the ensuing general meeting. Mr. George Smith is the other director who retires on the present occasion, and, being eligible, offers himself for re-election. The vacancy caused by Mr. Otley ceasing to be auditor on becoming a director will fall to be filled up by the shareholders at the ensuing general meeting. Mr. James Russell Frewer has signified his intention to offer himself for election as auditor in Mr. Otley's place.

THE AMALGAMATED SOCIETY OF ENGINEERS.—In the thirty-fourth annual report, issued this week to the members, Mr. John Burnett, the general secretary of the Amalgamated Society of Engineers, states that for the general industries of Britain 1884 has not been a good year, but it was quite evident that the depression which had affected their own trade so grievously had not been the result of foreign competition, or a lessening of demand from abroad for the articles which they produced. Want of employment for their members had been a characteristic of the year, and in their monthly returns of out of work members, which from 1883 in January had increased to 4090 in December, a retrogression from moderate to very bad trade was clearly shown. As the reason for this was not to be found in the foreign trade returns, they must look elsewhere, and it was largely attributable to the collapse in the shipbuilding trade, which at a moderate computation had made a difference to the labour market of 7½ millions of money. With regard to the position of the society, they had at the close of 1883, 424 branches. Since then they had opened new ones in Cheltenham, Glasgow South, Long Eaton (Derbyshire), Brisbane (Queensland), Winnipeg (Canada), and South Brooklyn (U.S.), making a present total of 430 branches, which were distributed as follows:—England, 307; Scotland, 42; Ireland, 14; Australia, 10; New Zealand, 3; Queensland, 2; Canada, 7; Malta, 1; Bombay, 1; the United States, 42; and France, 1. During the year admissions of new members had been much fewer, and exclusions much larger than in 1883, the admissions numbering 2872, and the exclusions 1988, and with the close of the year they had only an increase of 263 members, the total being 50,881, as compared with 50,418 at the close of 1883. The income, owing to a special levy which had been made had been the largest in the history of the society, and had reached the large total of 157,484l., an increase over the previous year of 22,835l. The total outlay for the year had been 172,841l., which was 48,117l. more than they spent in 1883. Out-of-work support, which had required 59,056l., had taken the lion's share of this outlay, and special strike expenditure had been very heavy, the amount being 20,499l. to their own and other trades. Sick benefit had taken, 27,977l.; funeral benefit, 8253l.; and superannuation, 30,519l. Briefly summarised the present position of the society was as follows:—At the end of 1884 they had 50,681 members, distributed among 430 branches. Their total income for the year was 157,484l., and their expenditure 172,841l. They had thus spent 15,357l. more than they obtained, and deducting this from their previous balance of 178,125l. they had still left an accumulated fund in the hands of the branches and offices of 162,768l.

STEAM-ENGINE MAKERS' SOCIETY.—The report just issued by the above society shows a slight reduction in the number of unemployed members as compared with the previous month, the number of members in receipt of out-of-work pay being now about 3½ per cent. of the total membership. The one bright feature in the returns seems to be a continued improvement in shipbuilding centres, whilst private locomotive building firms are, generally speaking, full of work; but railway shops are full handed, and in some cases working short time, whilst the holidays have been utilised for extended suspensions. Tool makers are moderately employed, but engineers and millwrights are not so fortunate, especially those who are in mining districts, from which the statements or returns are far from cheering. Manchester, Bolton, Oldham, and Rochdale, are kept fairly employed, and in these districts there are very few of the members in receipt of out-of-work support.

THE TRANSVAAL GOLD EXPLORATION AND LAND COMPANY.

The ordinary general meeting of shareholders was held at the City Terminus Hotel, Cannon-street, yesterday.

Mr. HERBERT MAGNIAC in the chair.

Mr. C. H. BURNAND (the secretary) read the notice convening the meeting. The report and accounts were taken as read.

The CHAIRMAN said: Gentlemen, in meeting you to-day I do so with every feeling of consideration for the great disappointment we have all experienced in this hitherto unfortunate enterprise, the circumstances of which are certainly of a most exceptional character, it being apparent to all that the formation of the auriferous deposits of the Transvaal are of a most exceptional description. I cannot altogether ignore the complaints made as to the management of this company, but it appears to me that they are very easily disposed of. When people buy a mine, the first thing they hope for is a lot of mineral; but that is just what we lack. If we had lots of mineral, rich enough to pay for crushing, and to return a dividend, we should have had no complaints. This company, when it was first started, was a private one, and was never intended to assume such dimensions. It was merely a company because of the convenience and facilities afforded to any joint enterprise by being so constituted. When I joined the committee, in July, 1883, I was annoyed to find how very much larger the number of shareholders had become than when I first heard of the company; but there is no law to prevent the buying and selling of shares. The company's shares when the company started were in so restricted an area as, with the exception of the vendors, to have been held by a body of men nearly all friends one of the other, and who were prepared in going in for such a speculation as a mine to think of it as a mine—an investment in which they might get 100 per cent. out of it, or might lose the money. The nature of the investment is such that any prudent man writes off such an amount as he puts into it in the ledger of his mind. I have received a circular signed by Mr. C. Howard, one of our shareholders, which I now hold in my hand, and with your permission—as I think I am justified in assuming that it contains the principal complaints regarding this company—I will take it clause by clause as an excellent basis for my address to-day. The first clause in the circular says “that Mr. Crutwell's report on which the capital was originally subscribed is so false and misleading as to call for a most searching inquiry as to its origin.” Well, Mr. Crutwell's report is the answer and justification for our action at the commencement of the company, and is, therefore, a very important matter. I hold the report in my hand. The immediate cause of Mr. Crutwell's appointment was a request from the agents of the South African Loan and Mortgage Company in South Africa, that a mining engineer should be sent out to examine some property in the Transvaal, and two of the directors of the South African Loan and Mortgage Company—Mr. S. S. Young and the late Sir Bartle Frere—were directed to choose a geologist for this purpose. These two gentlemen applied to Mr. Brunell, the eminent engineer, and he, in his turn, made enquiries to Messrs. Brown and Adams, of Cardiff, who do a considerable business as mining engineers. They strongly recommended Mr. Crutwell, who had been articled to that firm. Not satisfied with this, these two gentlemen (Mr. Young and Sir Bartle Frere) applied to the School of Mines, where they had a most unexceptional character of Mr. Crutwell as a geologist, and he was accordingly sent out to South Africa, and compiled the reports, which I now hold in my hand. When Mr. Crutwell came home he was questioned by many people conversant with mining, and certainly succeeded in convincing them as to the immense value of the property. That he was deceived himself as well as deceiving others there is no doubt. Mr. Crutwell was an enthusiast; but I think you will agree with me that I cannot say that events have proved him to have been practical. (Hear, hear.) The second clause of Mr. Howard's letter is, “that the report of Mr. O'Donoghue, a mining engineer, sent out by the committee at a later period, has turned out to be equally unreliable.” Mr. O'Donoghue was appointed to go out and check Mr. Crutwell's report, as, if one-eighth part of that report was correct, there was room for a dozen companies to work on our property. He was recommended by my colleague, Mr. Lee, who has had vast experience in mining matters, and will explain why he made the recommendation. I will only say that most searching enquiries were made, independently of Mr. Lee, about Mr. O'Donoghue, Mr. Etheridge, of the School of Mines, said he could not recommend Mr. O'Donoghue too highly, and his testimonials were unexceptional. Mr. O'Donoghue, while not agreeing with Mr. Crutwell as to the formation of the reef, pronounced the property one of exceptional richness, and brought apparently convincing proofs as to the opinion he had formed. One immediate effect of this report was to bring Mr. Williams, our present most excellent manager, on to the scene of our operations, and we regret most deeply that he was not there at the outset—(hear, hear)—by which much of the disappointment we have encountered might have been avoided, and I should have been spared my painful task to-day. (Cheers.) Mr. Howard's next clause is—“That the report of a mining engineer sent out by me in November last, shows that the property when purchased was worked out, and is now almost worthless.” I have not seen that report, and the only thing I have heard about it leads me to be very pleased with what he says, because he told one of our shareholders whom I hardly knew that his idea was that we could not have a better manager than Mr. Williams if we searched the world through. I will leave all further reference to that clause at present. Then clause 4 says—“That the so-called 10,000 tons of quartz, for which 60,000l., or thereabouts, was paid, and which was assayed to yield 7 ozs. to the ton, has turned out to be an inconsiderable quantity of mere rubbish, yielding less than ½ oz. to the ton.” With regard to that I am not here to criticise the accuracy of the statement, apparently made in a somewhat haphazard manner, as neither the amount paid nor the amount for which the consideration was paid are correct. Be that as it may, clause 4 is fully answered in our circular of the 5th February, which I will read if you like. In it we say that “it would of course be unwise to base any estimate upon such exceptional returns.” I may remark that we have every reason to believe that 10,000 tons of quartz is about the correct quantity, but unfortunately about half of it is of so low a grade as to be condemned by Mr. Williams as not worth crushing. There is no room for doubt that both Mr. Benjamin and Mr. Crutwell were grossly deceived by the diggers as to the value of the surface quartz. I may also remark that they were not the only people deceived—mining experts among the number—other companies having been started here mainly on their assertions as to the immense value of the Transvaal gold fields, which I still believe in. (Hear, hear.) While speaking of other companies I may here make the remark that I believe I am quite correct in saying we are the only English company which has sent home gold. As to clause 5 in Mr. Howard's circular, “That the circular of Feb. 5, 1884, upon which the shares rose to 3l. 10s. per share, and upon which the further capital was obtained, has turned out to be illusory and deceptive.” I know not what deduction Mr. Howard would have you draw therefrom; but it would appear to me that, if nothing worse, he wishes to attribute disingenuous motives to those who have lost their time and their money in trying to promote your interests, and which it would appear is to be recognised only by imputations of the grossest character. I may say here that we had ample grounds for every statement contained in our circulars; and to have said less than we did would have been to have suppressed from the shareholders' knowledge our own belief in the value of the property and our agent's reports. (Cheers.) Shareholders must also bear in mind that our circular could only contain a reflex of the opinions of those who represent us, and whom we are justified in believing so long as they retain our confidence. (Cheers.) Mr. Howard invites your support for a committee of investigation, and he would seek to heap further indignity on the committee, utterly regardless of the fate of the company; but we feel well assured, notwithstanding the disappointment we have all experienced, and the time of adversity we have passed through, you would rather seek to support those who have endeavoured to discharge onerous and anxious duties conscientiously, loyally, and

faithfully to you, than to do anything to wreck the company at the present moment. (Cheers.) Gentlemen, I now move, "that the report and accounts be adopted."

Mr. CUMMINGS said that one of the mistakes which was made was the sending out of an apprentice engineer to the property.

Mr. CROWDER said he did not know whether Mr. Howard was in the room, but he certainly did think Mr. Howard should have been present to move an amendment.

A SHAREHOLDER said Mr. Howard had been taken unwell, but was in the hotel.

Mr. CROWDER said he thought the committee had acted to the best of their judgment. It had been stated by the Chairman that Mr. Benjamin had been deceived from the first. He stood subject to correction, but it struck him that if a man sold a property under a misapprehension, even not knowing it himself, such person was subject to refund the purchase money. Therefore it was a question whether Mr. Benjamin ought not to refund the money. Of course Mr. Benjamin could not be expected to give up everything, but he ought to give up part. He (the speaker) took his shares on the reputation of the gentlemen who composed the committee. At the time he did not look upon this as a speculation, because the shareholders were supposed to have bought 10,000 tons of stuff which was stated to be above ground. As regarded the formation of a new company, it was necessary to have some alteration in the committee before the shareholders would put any further money into the concern. He did not like the debentures hanging over the company, and he hoped a call would be made sufficient to keep the whole of the property in the hands of the shareholders.

Mr. GUELLA said he had invested 8500*l.* in this company from a knowledge of Mr. Benjamin, and as to Mr. Benjamin refunding anything, he could only say that was impossible, because Mr. Benjamin was a ruined man. He (the speaker) was allured into this company by the prospectus; but he would not go into the past misfortunes, and their duty was to see what was best to be done in the present and in the future. The Chairman had not stated how the 2*s.* per share call would be employed; and before the shareholders put their hands in their pockets they would like to know what were the prospects of the mine. He thought a call of 2*s.* per share was too heavy. He pointed out that the whole of the company's property had not been prospected. He should support the adoption of the report and accounts.

Mr. C. HOWARD went at some length into the history of the company, and insisted that the promoters of the company did not sufficiently verify the report of Mr. Crutwell. He had taken the part he had, and had issued his circular, in discharge of what he considered a public duty. He contended that the original capital of 120,000*l.* was raised upon a report which was false in every respect, because that report stated there were 52 proved reefs, estimated at 6,819,000 tons of quartz. As a matter of fact, not a single true reef had been proved to exist upon it. He complained that some time after the company was formed Mr. Escombe visited the property, and at one of the meetings afterwards Mr. Farquhar stated that Mr. Escombe verified all the statements which had been made. He asked him who Mr. O'Donoghue was, and who sent him out. He (Mr. Howard) for his own satisfaction, sent out an independent mining engineer of long experience—namely, Mr. Cooper—and Mr. Cooper on his return stated that his general opinion of the property was unfavourable, that the veins were not true fissure veins, and that the rich portions of the property appeared to have been worked out. Looking at all the circumstances, he asked whether it was worth while throwing good money after bad. He moved that a committee of investigation be appointed to enquire into the history of the company, and report to the shareholders. He also suggested that Mr. George Benson Monkhouse be appointed a joint liquidator with Mr. Nichols.

Mr. SWINTON thought the directors ought to have given the shareholders more information. Was the quantity of stuff stated to be above ground measured before the statement was sent out to the shareholders, and why were three years allowed to elapse before the shareholders were made aware of the small quantity of gold obtained from the reef?—Mr. ESCOMBE said that one tale was good till another was told. Mr. Howard had posed before the meeting as a martyr and a victim; but as a matter of fact, Mr. Howard was not the innocent victim which he would lead the shareholders to imagine. When the property was first brought to him (Mr. Escombe) it was accompanied by a certificate from the Cape Commercial Bank certifying to the purchase of 55,795 ozs. of gold. At that time he was at Cape Town, and he telegraphed to London for an experienced geologist to be sent out. He telegraphed to the South African Mortgage Company. That was in February, 1882. Upon the receipt of that message in London the services of Mr. Crutwell were engaged, through the instrumentality of Sir Bartle Frere, and Mr. Crutwell entered upon his services with the highest testimonials for professional skill and integrity, and after having been subjected to a most rigorous cross-examination by experts. He believed Mr. Howard had a personal interview with Mr. Crutwell before he went out, then why did not Mr. Howard ascertain his merits? In the following year he (Mr. Escombe) went to the Transvaal, and Mr. Crutwell showed him carefully over the property, and all that Mr. Crutwell said appeared to be perfectly sustainable. During his stay the manager struck a most extraordinary rich formation, and the first portion of ground which was tried consisted of 100 lbs., which produced equal to 30 ozs. per ton. And this left no doubt in his mind that Mr. Crutwell's declarations were true. After this Mr. O'Donoghue was sent out. He went on to refer to the formation of the company, and read letters which he had written which contained the strictest instructions regarding the way in which the promotion money was to be paid, and no money was to be paid till the reports about the yield of gold were justified by the results. He was only one of a syndicate, but they assumed responsibility to the extent of 100,000*l.*, and if this company had not gone through the trouble would have been upon their shoulders. Mr. Howard had frequently been at his office, and when Mr. Howard had expressed himself as dissatisfied, he (Mr. Escombe) had offered to take his shares at part.

Mr. HOWARD was understood to deny this. Mr. ESCOMBE said that when Mr. Howard sent over Mr. Cooper, who, as Mr. Howard stated, was merely a friend, and wished for letters of introduction, he (Mr. Escombe) gave him such letters, and therefore, Mr. Cooper went as a spy in the land, and accepted the hospitality of the company under false pretences, and then wrote that nonsensical report to which Mr. Howard had alluded. Mr. Cooke knew no more about the mine than what he picked up amongst the niggers. Because Mr. Howard's scheme had come to grief that gentleman came here and threw mud at the committee. He characterised as utterly unfounded the statements of Mr. Howard. Going on to refer to the prospects of the future, he said that Mr. Williams' opinion was that in order to ascertain the true worth of the mine some more economical system of exploration should be adopted, and the shareholders would be right in following the recommendation of such a man, because he was a man of judgment and integrity, and would not spend a shilling without justification. (Cheers.)

Mr. FARQUHAR also strongly denounced many of the statements made by Mr. Howard as absolutely devoid of any foundation. He (Mr. Farquhar) absolutely refused to have anything to do with the company unless Messrs. Mattheson acted as agents, and that every cheque should be written by them, and he (Mr. Farquhar) was the person who engaged Mr. Williams to go out. He then went on to refer to the fact that he and his friends had a large monetary interest in the company, and said it was most unjustifiable that Mr. Howard should come there and make such false statements regarding gentlemen who had worked hard for the company.

Some further discussion ensued, in which Mr. Peall, Mr. Balfour, Mr. Tottenham, and other gentlemen took part.

The amendment for the appointment of a committee to investigate the past history of the company, and report to an adjourned meeting was then put to the meeting.

The CHAIRMAN declared the amendment lost. This gave rise to considerable uproar, and one or two gentlemen intimated their intention of demanding a poll.

Mr. HOWARD said he would withdraw his amendment on condition that Mr. Monkhouse should be elected an independent liquidator to act with Mr. Nichols.

The CHAIRMAN said this could not be embodied in any resolution, but the directors would agree to it.

The resolution for the adoption of the report and accounts was then put and carried.

The shareholders then formed themselves into an extraordinary general meeting, and the CHAIRMAN moved the following resolution:—"1. That the company be wound-up voluntarily, and that Charles Lee Nichols, of 1, Queen Victoria-street, E.C., be, and he is hereby, appointed liquidator for the purposes of such winding-up. 2. That the liquidator be, and he is, hereby authorised to consent to the registration of a new company with the same name as this company, and with a capital of 300,000*l.*, divided into 300,000 shares of 1*l.* each, and a Memorandum and Articles of Association in the form in that behalf already prepared with the privity and approval of this company. 3. That the said liquidator be, and he is, hereby authorised to enter into an agreement under the 161st section of the Companies Act, 1862, with the new company (when incorporated) for the sale and transfer to such company of the business and assets of this company upon the terms set forth in the draft agreement submitted to the meeting, subject to such modification thereof as the said liquidator may think fit."

The resolution having been seconded, Mr. MARKS, and some other gentlemen, strongly urged that Mr. George Benson Monkhouse should be associated with Mr. Nichols, in the liquidation of the company, and in the end it was understood that Mr. Monkhouse should be associated with Mr. Nichols.

The resolution was then put and carried.

Mr. MARKS then suggested that three independent shareholders should be amongst the signers of the new Articles of Association, and the Chairman stated on the part of the board that this should be done.

A conversation then ensued with regard to the call, and the general feeling seemed to be that a call of 2*s.* per share should be made.

A vote of thanks to the Chairman closed the meeting.

THE STATE OF HIDALGO, MEXICO—No. I.

A BRIEF SKETCH OF ITS MINING INDUSTRIES.

BY FRED. W. BAWDEN, M.E., PACHUCA, MEXICO.

The State of Hidalgo, which prior to the year 1869 was included in that of Mexico, is situated between 19 deg. 37 min. and 21 deg. 10 min. north latitude, and 1 deg. 9 min. east and 0 deg. 46 min. west longitude of Mexico. It is bounded on the north by the States of San Luis and Vera Cruz; on the south by that of Mexico; on the east by Puebla, and on the west by Queretaro.

DIVISION AND POPULATION.

The State is divided into 14 districts, which are named after the chief town of each as follows:—

Inhabitants.	Inhabitants.
Actopan 44,938	Molango 28,550
Apam 16,384	Pachuca 58,729
Atotonilco 23,548	Tula 33,923
Huepita 61,296	Tulancingo 55,903
Huichapan 42,872	Zacualtipan 14,759
Ixmiquilpan 34,564	Zimapan 27,991
Jacala 22,798	
Meztitlan 19,851	Total inhabitants . . 486,104

CHIEF TOWN.

The chief town or capital of the State is Pachuca, situated in 20 deg. 7 min. 38 sec. north latitude, and 0 deg. 24 min. 29 sec. east longitude, meridian of Mexico, and about 8000 ft. above the level of the sea. It stands in a valley formed by the Sierra Madre mountains, and contains about 30,000 inhabitants. It is distant about 300 miles from the port of Vera Cruz, and 60 miles from the City of Mexico, with both of which places it is connected by railway. It is the centre of the staple industry (silver mining) of the State. In point of salubrity it can neither be considered healthy or unhealthy as sanitary measures are much neglected, but on the other hand Nature, in the shape of the north winds and heavy rains so prevalent here, supplies, in this particular, what art lacks, and acts as a natural scavenger.

CONFIGURATION.

The State may briefly be described as a very mountainous one with tracts of tableland interspersed. Some of the mountain peaks rise to a great height, notably the Zumate rock, near Pachuca, which is over 12,000 ft. above sea level. The Organos, near Actopan, 10,500 ft., and the Ventanas, near Pachuca, 11,000 ft. One very notable feature in the State is the great valley (barranca grande), which passes about 30 miles in a north-east direction from Pachuca, the sides of which descend almost perpendicularly to a depth of over 2000 ft. below the surrounding country, which is mostly tableland. This extraordinary occurrence is supposed to have been occasioned by volcanic agency at some remote period; be this as it may, it undoubtedly tends to drain this district of a great deal of water, as its bottom is at least 3500 ft. lower than the surface of any mine in this neighbourhood, and there are over 40 mines in this district which average over 420 yards deep, and yet only six pumping-engines are required to pump the water from the whole.

RIVERS.

There are no rivers of any consequence in the State. What are often called rivers are nothing more than brooks, which having their source in the mountains run a mile or two down into a plain, where they are either quickly evaporated or sink into the soft soil. These streams, however, in the wet seasons at times assume formidable dimensions.

LAKES.

There are four lakes, if they can be so called, in the State; they are named Meztitlan, Tecocomulco, Apam, and Almoleya.

CLIMATE.

Owing to the configuration of the State the climate is very varied, but in given places is very equable throughout the year. On the mountains it is cold, on the tablelands temperate, and in the valleys hot. The average temperature throughout the year at Pachuca (the capital) is about 67 deg. Fahr. Northerly winds, however, are very prevalent, and these have a cooling influence.

INDUSTRIES.

The chief, and indeed almost the only, industries of the State are mining and farming, but as the latter is almost wholly limited to the cultivation of the maguey plant, for the production of a drink called "pulque," it is of the former that this paper especially treats; and it may be wise to mention here that although silver is the mineral mostly sought for, yet the State contains very rich lodes and deposits of iron, copper, lead, coal, and manganese, to which as yet very little attention is paid, but at a not very distant future, when a more extensive system of railways is introduced, and when antiquated ideas give way to modern science, these now almost neglected minerals will become rich stores of wealth. The chief silver mines of the State are situated close to the City of Pachuca and its adjacent town Real del Monte. These mines have been and many still are very rich, and consequently have given the owners enormous returns for the money invested in them. Foremost amongst these mines, and which for richness hold a leading position among the richest mines of the world, are the Rosario and Guatimotzin Mines, both

situated close to the Pachuca, and on one vein. These two mines, which are practically one, were first acquired in the year 1834 by an English company, who, for reasons which it may not be wise to speak of here, eventually sold them for a comparatively trifling sum to a Mexican company, who, profiting by the mistakes made by the former owners, went to work, and in a very short time struck a rich lode which in five years gave over \$7,000,000 profit, and has continued (almost without a break) to give splendid dividends to the present day. The total amount of profit made in this property is about \$24,000,000, or 4,800,000*l.* to date. The next mine in point of importance is the San Buena and Maravillas (really two mines, but worked as one), which was originally worked by the Aztecs, afterwards by the Spaniards, who were obliged to abandon it when the Mexicans declared their independence in the year 1821. In the year 1852 it was acquired by the present company (a Franco-Mexican one) who have extracted from it over \$20,000,000 or 4,000,000*l.* in dividends alone, to say nothing of the valuable machinery erected on the mine. The mine is now 600 yards deep, and its present yield is 1,614,000 ozs. of silver per annum. The third important silver mine of the State is the Eucino, also situated very close to Pachuca. This mine, too, was originally worked by the Aztecs, and is a standing memorial to their ability and discernment as miners. Records are extant showing that the yield of silver during the time of the Spaniards was over \$1,000,000 worth per annum from this mine. The present company (an Anglo-Mexican one) acquired it about the year 1862, and have worked it successfully ever since. The next is the Santa Gertrudis Mine, which is distant about 3 miles from Pachuca. This property, was acquired about the year 1823 by a Mexican family, but comparatively little was done till the year 1874, when it was taken in hand by an English company, who, after expending about 1000*l.* in sinking a shaft, met with a splendid vein of silver at a depth of about 140 ft. from surface, since which time the mine has given to date \$1,320,000*l.* profit, besides erecting over \$130,000 worth of machinery. This mine is now 315 yards deep, and the present yield of silver is 570,000 ozs. per annum. The Dificultad Mine, situated about 6 miles from Pachuca, will next be noticed. This property is worked by an Anglo-Mexican company. It is on the same run of lodes as the San Buena, Rosario, and Guatimotzin Mines, its present depth is 400 yards, and its annual yield of silver is 1,248,000 ozs. The El Bordo and El Cristo Mines, situated in close proximity to the Pachuca, are being worked by a private company, so that statistics cannot be obtained, but it is well known that these mines are very rich. They are 253 and 410 yards deep respectively. The Porvenir Mine, which is situated almost within the City of Pachuca, has also turned out a very rich mine. Its present depth is 400 yards. The greatest depth at present attained by any mine in this immediate neighbourhood (Pachuca) is 635 yards. This is the San Pedro Mine, the shaft of which is being sunk to intersect the Rosario lodes at a greater depth. The silver mines of the Real del Monte, distant from Pachuca about 6 miles, will now occupy our attention. These valuable properties were, tradition asserts, discovered by Indians, through lighting a fire on the surface portion (back) of a lode, and the heat melting the ore gave ocular proof of the existence of the precious metal. No authoritative records, however, are extant of a later date than about the year 1739, when several mining properties were granted by Charles III. of Spain, the then reigning monarch of Mexico, to a Spaniard named Terreros, afterwards known as the Count of Regla, who, it is said, extracted over \$56,000,000 worth of silver from them; but in the year 1834 the same company that acquired the Rosario and Guatimotzin Mines already referred to, bought the properties from the family of the Count of Regla, and in its turn sold them, with the two Pachuca mines just mentioned, to a Mexican company, who have worked them more or less successfully ever since. This company is known as the Real del Monte Mining Company, and although there is a deal of English capital in it the majority is Mexican. It is not only a mining company, but also embraces in its enterprise the reduction of ore, there being no less than seven large reducing works owned by the company. An idea may be gained of the extent of this company's works when it is known that their weekly pay exceeds, on an average, \$38,000. It is not the object of the writer to particularise each mine in this paper, as time and space will not admit, but merely to give the names of the most famous mines in each district or group. In accordance with this object it may be stated that amongst the Real del Monte group the chief mines are Carretera, Moran, Dolores, Acosta, and La Cruz. The mines of this district are continuations of the Pachuca veins, and the greatest depth attained by any mine in the locality (up to date), is 1750 ft. This is the Dolores Mine. The silver veins of the El Chico group of mines will next call for notice. This place is about 13 miles north of Pachuca, and as the general course of lodes there is east and west, or thereabout, the El Chico veins are parallel ones to those of Pachuca and Real del Monte. The precious ore in this group appears to occur, in the majority of cases, at a very shallow depth; sometimes it crops out at surface, and although it must be confessed comparatively little has been done to develop the district, yet, in the majority of cases, of the mines worked, the veins have not been remunerative at a lower depth, than about 800 ft. from surface. This, however, may yet be refuted if the mines be prosecuted to a greater depth, but in order to do this foreign capital will have, probably, to be employed.

PATELEY BRIDGE.—The main cross-cut north-east from Blackhill adit level is now in a total distance of 43 fms. We have passed through another branch of linespar intermixed with lead ore. In the Blackhill adit level east we have passed through a hard bar of knotty ground in which the vein has been "nipped," but is opening again out most satisfactorily. Other points without change. We have a small parcel of ore ready for smelting.

EAST TREMBLO.—The ground in the adit cross-cut driving north as last reported. From the adit end driving east of cross-cut, on No. 2 lode, the lode is 2½ ft. wide, value 80 lbs. of tin to the ton of stuff. We have cleared up the north shaft about 15 fathoms from surface, and found left by the old workers a lode 3 ft. wide; good work for tin. This is likely to turn out a very productive part of this mine.

From Ravenswood a parcel of 1750 ozs. of gold has been sent to Townsville.

A CAKE of 220 ozs. gold, being the result of three weeks' operations at the New Era Mine, was brought into Adelaide lately.

OBITUARY.—The death is announced at the age of 70, of Mr. JOHN STRAKER, of Stagshaw House, near Corbridge, who died at Torquay after a short period of ill-health. Mr. Straker was the youngest son of the late Mr. Joseph Straker, of Benwell House, Northumberland, and Ann, daughter of the late Mr. Henry Smith, of Loosing Hill, Durham, and was a J.P. and D.L. of the counties of Durham and Northumberland, and lord of the manors of Burradon, Wingate, Stagshaw, and Tyneside, Northumberland; and of Bradley Hall, Durham. He was also one of the largest coalowners in the country and the head of the well-known and extensive firm of Messrs. Straker and Love, and was besides a director of the North-Eastern Railway Company.

Mining Correspondence.

BRITISH MINES.

BEDFORD UNITED.—H. Trezise, April 14: I beg to hand you my setting report for eight weeks ending 5th inst.—The 133 east to drive by two men, at 52, 101, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

CARN CAMBORNE.—W. C. Vivian, April 15: I can report no change worthy of notice since my last. We are looking out for indications of the cross-course in the 105 and west, but have some fathoms yet to drive to reach it.

OREGON.—H. Hotchkiss, April 14: The 130 yard level, Meadow shaft, to rise in back of east of shaft, by two men, is set at 1400, per fathom, 1 fathom; the 101 is 1 ft. wide. No drive upon the lode, west of shaft, is set to 101, per fathom; this end is a very powerful lode of spar, 5 to 6 ft. wide. On the hanging-wall a sprinkling of blende ore has come in at present; the lode is very difficult for breaking, but from present appearance of the lode I am daily expecting a more favourable change to take place.

CWMYSTWTH.—J. B. Rowe, April 15: In the trial stop, over Gill's upper level, west of James's cross-cut, on the new lode, the lode has somewhat improved in value since my last report, and now yields 2 tons of blende and 5 cwt. of lead ore per fathom. In the two stopes over the middle and Raw's level the lode yields on an average 2 tons of blende and 10 cwt. of lead ore per fathom. The tribute pit, which is a number, continues to look fairly well. The pitwork at Kingside shaft has been overhauled and put in order, and the wheel stopped. Our purpose is to get the water up to the adit again, when we shall pump to surface to assist in drawing the machinery and ease our pools. Pugh's water-wheel continues to work well as yet, and is forcing out the water fast. We hope to get the 15 clear in a few days. Our other machinery is in good working condition, and the supply of water fair.

DREBSBY.—J. Roberts, W. Sandoe, April 15: In the bottom of the sinking below No. 8 the lode shows a good mixture of lead and blende, and is letting out water very freely. In the south end of the stopes the lode is looking better to-day than I have seen it for some days past, and is worth 1½ ton of lead to the fathom. To the north of the sinking the lode also shows an improved appearance, especially at one point where the water has increased very much, and which we believe has drained the hanging side of the lode. On this hanging side of the lode we have been clearing away some accumulated stuff for the past day or two, and hope to be able to start sinking there to-morrow or the following day in a good lode of ore.

DEVON GREAT CONSLS.—Isaac Richards, April 15: Wheel Maria: During the last month the eastern shaft in the Capel Road lode, the lode proving 2 fms. 1 ft. 7 in., making the total depth 12 fms. 1 ft. below adit, the lode proving 4 ft. wide, of a very promising character, and yielding some good quality copper and muffle ore.—Wheel Emma: Railway Shaft, New South Lode: The 220 fms. level, west on the south part of the lode, has been driven 1 ft. 2 in. 5 in., the lode proving from 3 to 4 ft. wide, of a strong masterly character, and yielding small quantities of copper and muffle ore, and an average sample of 8 tons of stuff from the lode yielded 13 lbs. of tin to a ton—a much better yield than was found in the lode above (the 205).—Watson's: The engine-shaft has been sunk 1 ft. 5 in., the ground proving a very good quality of blende, and the production of mineral. This shaft having reached a sufficient depth for the 124 fms. level, a top pit was at once cut, and the lode cut into, and, judging from its very promising character and productiveness in the level above, and also from the congenial nature of the ground, we hope to find it productive here also. The 112 fms. level, west of the engine-shaft, has been driven 1 ft. 4 in. 9 in., the lode proving 4 ft. wide, of a very promising character, and yielding saving work of copper and muffle ore. The 44 fms. level, east and west of the western shaft, has been driven 1 ft. 5 in. 2 in., the lode proving 4 ft. wide, of a very promising character, and yielding saving work of copper and muffle ore. The 112 fms. level, east of the engine-shaft, has been driven 1 ft. 4 in. 9 in., the lode proving 4 ft. wide, of a very promising character, and yielding saving work of copper and muffle ore. The 44 fms. level, east and west of the western shaft, has been driven 1 ft. 5 in. 2 in., the lode proving 4 ft. wide, of a very promising character, and yielding saving work of copper and muffle ore.

DRAKEWALLS.—Thomas Gregory, April 17: The men are making fair progress in sinking the engine-shaft below the 172, and the lode and branches maintain their value of 12½ per fth. for tin, with more branches on the north. The branches in the 50, east of Mathew's shaft, continue to produce fair class tin stuff. We are opening a paying piece of ground here. The stopes below the 60 east are unchanged for the week.—North Lode: We have taken down the lode here, which proves to be from 15 to 18 in. wide, producing fairly good tin stuff. We have set a rise in back of the same level to two men in favourable ground, to prove the lode as we go up, and open ground for stoping. The prospects in this part of the mine are improving.

DOUHY PERU.—R. and J. Nancarrow, April 11: In sending you our fortnightly report we do not see any material change since the 31st ult. In the 80 west, where the lode maintains its character in every respect, and is still very hot; here we have about 20 fms. yet to drive to get under the productive ground gone down from the 70, or level above. In the 70 west we are still meeting with splendid stopes of blende, and as we cross out through the lode to the south we may daily expect a further improvement, judging from appearances to day, having just come up from underground. We look at this as being a very important point, seeing the improvement recently met with at the 60, which looks as if it is to the south at the 70, and it is also in whole ground to the 40. The 60 west is suspended for the time being, but the ground is all set on tribute close up to the forebrest, and looks likely to be worked in advance of said end by the tributaries. All the pitches are without change with the exception of one in the bottom of the 90, where we have a fine lode of solid blende, now producing over 5 tons of same per fathom, which is of good quality, with a nice branch of silver-lead under the blende. All surface operations are progressing with satisfaction, and the machinery, with pitwork, working well. We sent away three parcels of blende last week, and are sampling three others to-day, which looks well for realising good prices, and we hope from present prospects that our returns will be increased another month.

EAST HEWAS.—Thomas Parkyn: Since my last report we have not done much on the copper lode, our attention has been called at the south adit, which has a portion fallen in, and we hope to clear it this week, when we shall at once open the south tin lode, of which you shall be fully advised. I beg to say that we have sunk several pits on the back near the surface, and have traced its bearings, and by opening at the adit you will have backs of ore 30 fms.; and as this lode has yielded such immense quantities of tin immediately west, I think from the indications now exposed on the surface that you may expect the same results.

EAST BLUE HILLS.—S. Bennetts, W. K. Mitchell, April 15: The last taking down of the leader part of the lode in the shaft has laid open a part 3 ft. wide of capital tin stuff; 7 ft. of the lode is now seen without finding the footwall, and so far as seen is worth at least 20½ per fathom. The shaft being now sufficiently deep, a 20 fms. level will be at once started both east and west. In the 10 east there is no change worthy of notice. In the adit east end the lode is worth 5½ to 6½ per fathom, and two stopes respectively (at the 10 fms. level) are worth 7½ and 10½ per fathom.

BOTON.—W. Bowman, April 13: Since my last report all our development works have made fair progress. In Water Bank Mine the winze sinking below the 45 is now down about 10 fms.; the bottom is in very hard ground, composed of limestone, blende, pyrites, and spots of yellow copper ore. We have not much increase of water, and have no difficulty in dealing with it. The cross-cut driving from Clayton's deep adit towards this work is now advanced 12 fms., and making good progress, considering the hardness of the rock. Clayton's engine-shaft is now fitted with skipways to the water, and we are completing the fixtures at shaft top, so as to commence winding the dead stuff from 110 and 130 in a day or two. This will give us an opportunity of inspecting the ground more completely, and I hope soon to find a way into the copper pipe that has led the old miners down to this depth. We have very little tradition to guide us below the 110, and it is evident from what can be seen that the mechanical appliances of our predecessors had found a limit not far below that level. All the geological surroundings, and the character of the veins in the level above, are such as would lead anyone to expect richer ore than in any of the levels above. The other deep adit level is much the same as for some time past. In Chadwick's winze the ore branch is extended, but not quite so rich as a fortnight ago; it is less concentrated, but looks fully as promising for a larger pipe in depth. All machinery is working well both at surface and underground. I have put down foundations for the crushing mill, and am running up part of the walls to receive the machinery now upon the ground, so as to keep the various parts together, and protect them from deterioration.

FRONGOCH.—J. Kitto and Son, April 13: Since the date of our last monthly report all our underground operations have steadily and, on the whole, satisfactorily progressed, and, having a good supply of surface water, the same remarks apply with equal force to our dressing department. The 34 driving level, referred to in our last report, still continues to look well, and the lode fully maintains its size and producing qualities, being 3 ft. wide, and yielding 1½ ton of lead and 2½ tons of blende ore per fathom. The tribute department is without change to notice, the various pitches continuing to yield about an average quantity of lead and blende, the result of which has enabled us to sell 200 tons of blende for March, and we hope to sell the same quantity for the current month.

GAWTON COPPER.—George Rowe, April 12: We are still cross-cutting the lode in the 117 east both north and south, where we have discovered some fine stopes of copper ore and arsenical muffle. The stopes in the back of this level is yielding 7 tons of arsenical muffle and ore per fathom. The stopes in the back of the 105 east is yielding 9 tons of muffle per fathom. The lode in the stopes in the back of the 95 east is yielding 7 tons of muffle per fathom. The stopes in the bottom of this level is yielding 9 tons of muffle per fathom. The stopes in the bottom of the 79, west of shaft, will yield 10 tons of muffle per fth. The stopes in the back of the 79 east will yield 6 tons of arsenical muffle per fathom.

GOGINAN SILVER LEAD.—J. Kitto and Son, April 13: There has been no change of importance in any part of our underground departments since the date of our last report. The tribute pitches continue to yield the same quantity of ore per fathom, which is sufficient to pay for working them and a little over, but the dead charges will about absorb the profits. We have delivered the parcel of ore sold in March to Messrs. Sheldon and Bush at 10½ lbs. per ton, and shall sample a similar parcel in a few days from this date.

GREAT HOLWAY.—W. T. Harris, April 16: Roskell's Shaft, the 95 Level North: The prospect is slightly harder, the beds or layers have a sharper dip, an increase of water issues from the forebrest, and nice stones of lead are taken from the joint upon the hanging-side.—Level Engine-shaft Tributary: The 60, No. 1 pitch in back west, is worth 15 cwt. lead and 1½ ton blende per fathom. No. 2 pitch, in back west, maintains its splendid appearance, and value 3 tons lead and 1½ ton blende per fathom. No. 5 pitch, west, is producing fully 1 ton lead and 2 tons blende per fathom. Nos. 3, 4, 6, 9, and 10 pitches are without material change, and the value put upon them in my last report is applicable at present.—Bramcock Shaft, the 60 Level East: The No. 1 pitch in back is

now producing 1 ton of lead and 1½ ton blende per fathom. No. 2 pitch is worth 5 cwt. lead and 1½ ton blende per fathom.—Office Shaft: There is no improvement calling for remark. Surface operations making usual progress. Have to-day sold 30 tons lead, realising 279s., and to-morrow shall sample 40 tons blende.

GREAT WEST SHEPHERDS.—R. and J. Nancarrow, April 14: Since our report of the 31st ult. the sinking at both the new engine and Browne's flat-roof shaft has been continued with all possible energy by full pairs of men; both of these points are passing through a most congenial stratum for the production of mineral, and are now being sunk at 10½ per fathom. We are also cross-cutting south toward the middle lode by a pair of men at 2½ per fathom. All the surface work is being carried on in regular order. The machinery continues to work in usual satisfactory manner.

GREEN HURTH.—James Polglase, April 10: The bottom level is at present in a tight bar of ground, which is occasionally met with here; vein worth 1 ton per fathom. The north end (44) seems to be entering a better channel of ground for ore. No. 1 stopes is worth 5 tons per fathom. The vein has narrowed a little. No. 2 stopes is worth 4 tons per fathom. The bottom of No. 3 stopes is in a splice, and poor, but the vein immediately over is worth fully 1 ton per fathom. The 30 and north is producing good stones of lead, and I think will shortly improve. The driving north from rise in back of 30 is worth 2½ tons per fathom. This is a great improvement at this point. South from fore-mentioned rise the vein has been worth during the week 2 tons per fathom. Not quite so good to-day. We have the vein north from Robinson's sump at the adit level, and have seen ore in it this week. We are preparing machine and air pipes for the prosecution of the adit level east. Weather very severe, and hindering our dressing operations.

HEALEYFIELD.—John Trelease, April 10: We have started to put out a cross-cut to the east cheek of the vein from the north fore end, which will prove its width and character. The ground is changed from a hard quartzite to a good channel of ore and sandstone, well charged with oxide of iron, and occasional strings of lead ore. The stopes continue to yield about the same quantity of lead as last reported. We have no change elsewhere. We are clearing out the foundations for new engine-house with all possible speed.

MELLANEAR.—Capt. Toms and Harris, April 15.—There is no change of importance in any of our operations since last week's report. We shall sample on Tuesday next about 600 tons of copper ore. All our pumping and dressing machinery is in good working order. Next Saturday is our pay and setting, when we shall submit monthly reports to you.

MID-DEVON COPPER.—James Neill, April 11: A Shaft: The sinking has been delayed 23 hours this week, in consequence of a surface rock breaking at a well on Tuesday last, and also by having to add another pump to the sinking lift this morning. The shaft has been sunk by 12 men with rock drills, and by hand labour 1 ft. 9 in., total distance below 90 fms. plat, 5 fms. 3 ft. 8 in. The rock continues the same in its composition, but its cleavage improves. The influx of water gradually abates, and at present we have an ample supply of surface water for our wheels, and the machinery is working smoothly. O shaft: 8 ft. men were working at the top of the shaft, 55 east, muffle lode, for 12 hours while the water was being drained off a shaft, subsequent to the repair of the broken rod, and raised 15 cwt. of copper ore of good quality.

MOUNTS BAY CONSOLS.—W. Argall, T. Job, April 4: We have pleasure in reporting the lode in the 20 driving east of Pengersick shaft is still worth from 20½ to 25½ per fathom; so far as seen it is over 3 ft. wide, and more lode standing south, which will be taken down next week. There are ten tribute pitches working at the usual tributes. We hope now to increase our returns considerably.

NORTH ADON.—N. Richards, April 15: There is nothing calling for special remark in the mine. The sinking of the engine-shaft, &c., is going on in the usual way, and the pitwork and machinery working well.

NEW LANGFORD.—T. Gregory, April 15: We continue to make good progress in driving both the 10 and 30 levels west of engine-shaft; the lode in each end being large, from 3 to 4 ft. wide, producing from 2 to 3 tons of mixed ore per fathom. There is no important change to notice in any other part of the mine. Machinery, &c., all working well.

NEW WEST CARADON.—N. Richards, April 15: There is no change to notice in the mine since my last report. This level will soon be extended far enough to admit of opening out a little on the last branch intersected in the same, which in the cross-course has a very kindly appearance. No. 5 lode, west at this level, is 1 ft. wide, and producing rich stones of grey copper ore; but seeing that we have passed over some rich ore in the bottom of the level, I took the men from the end, and put them to sink on the lode, which to-day will produce fully 1 ton of rich grey and black copper ore to a fathom. A very good-looking lode. We shall push on the sinking in it with all possible dispatch to get it going down.

NORTH GREEN HURTH.—James Polglase, April 9: There is nothing new to notice in the mine or the south end, this week. The deep cross-cut continues about the same. The adit level in Hospital property is without change.

OLD SHEPHERDS.—R. and J. Nancarrow, April 14: The usual progress has been made in sinking Harvey's engine-shaft below the 112, and as we approach the lode we expect to find the ground become gradually easier, and it is now being sunk by 12 men, at 25½ per fathom. We have suspended for the time being the 112 west, and have set the men driving this level east, where we hope to change the water from the eastern part of the mine. There is no special change in the 112 east, but nothing worth saving, and there is still a large quantity of water which is undoubtedly coming from the lode before us; this end is now being driven by six men, at 4½ tons per fathom. Our tribute department has rather improved for lead since our last, but the blende has fallen off. We have delivered our last parcel of blende, and sample one more of this and one of lead to-day. Notwithstanding the large quantity of water we have to contend with, our engine-shaft and pitwork, as well as all the other machinery, continue in good order.

PATERSBYKE AND CLARGILL HEAD.—John Peart, April 10: The drift going south in Sir John's vein, from Archer's rise, is now all in vein stuff, and the lode is very rich. The cross-cut going west from the above drift to our Clargill Head vein is slightly changed; more small strings crossing and the beds are not rising so rapidly, an indication that we are getting near to the vein. The drift going north from cross-cut in low level is without change. Last week the two men were repairing the arch in horse level and that over the burn near washing-floors.

PARTIN.—Capt. Parkyn, April 16: We have out through the new lode, and find 15 ft. wide. I am taking and mixing an average sample from the whole piece of ore in it, but nothing worth saving, and there is still a large portion of the lode is very rich for tin. This water in the engine-shaft is decreasing, and I am rising above the back of the adit to let it down, when I shall at once complete the shaft to the adit. The new lode is a most valuable one. All other operations are progressing satisfactorily.

POLCREBO.—W. H. Martin, J. Richards, April 15: Highburrow shaft is sunk under the 50 fms. 2 ft.; sinking by nine men and three labourers (13 men), at 13½ per fathom. The lode during the month has been changeable; in the last 6 ft. the lode is very much improved, also the country rock, which is a piece of ore in it, but nothing worth saving, and there is still a large portion of the lode is very rich for tin. This water in the engine-shaft is decreasing, and I am rising above the back of the adit to let it down, when I shall at once complete the shaft to the adit. The new lode is a most valuable one. All other operations are progressing satisfactorily.

PLUSHEY.—Thomas Treloar, April 16: We have now six pits in our shaft, and we are making very fair progress in sinking for the number employed. We have engaged other men to come on next week, and hope to get a full pair in a few days. The branch I referred to in my last report has continued to produce muffle and spots of lead occasionally; it is underlying east, and will soon get out the shaft now. We have hit to put in some timber in the east to secure the ground, but the ground appears firmer again in the bottom of the shaft, and will not require timber again at present. The winding machinery continues to work very satisfactorily.

PRINCE OF WALES.—S. Roberts, April 15: During the past week our progress in sinking Watson's engine-shaft below the 102 has been rather slow, in consequence of a change in the ground, but I am very pleased to be able to report a discovery of some splendid rocks of tin in it, having the nature and character of a large and promising tin lode dipping into the shaft from the north. I am of opinion that in No. 1 north lode intersected in the cross-cut from the engine-shaft, the lode is 55 fms. deep, and it will be a new and very important feature in the mine, and will enable us to open out ground at once when the shaft is down, independent of the main lode. A few days will show more light on it. We set six tribute pitches to 14 men, at 12s. 4d. in 1½ tribute, the men to bear all costs.

ROMAN GRAVELS.—A. Waters and Son, April 16: The 125 north is in a lode 5 ft. wide, worth 30 to 40 cwt. of lead ore per fathom. The rise in the 125, south of new engine-shaft, is led to winze from the 110, and we have resumed the 125 south in a lode 3 ft. wide, worth 2 tons per fathom, and commenced a new stopes in back of the level, north of rise, on a lode also worth 2 tons per fathom. The 110 south shows a lode 6 ft. wide, worth 2½ tons per fathom. The lode in the 95 south, on hanging-wall side of the big spar vein, is narrow at present, and only worth about ½ ton per fathom. In the 80 south, close up to the end on hanging-wall portion, we are cutting into great spar lode, and expect to have to drive 4 fms. or more to reach the footwall; some stones of lead and blende are being met with here. The stopes are without change calling for remark since last full report thereon. The 125 tons sold to-day have realized 9444s. 7s. 6d.

RUSSELL WEST.—John Bray, April 16: I am very pleased to say the lode in the 57, east and west of the cross-cut at Stephens' engine-shaft, continues to look well for tin. We are carrying the level 5 ft. wide and 7 ft. high; there is still more lode standing to the south. I cannot give the full size or value until we cut south through the lode, which will be done as soon as convenient, when you shall know all particulars. We have at surface about 200 tons of tin stuff taken from the lode already for dressing.

STANDARD LEAD.—W. H. Borlase, April 16: The stripping down of the

new engine-shaft on the north and south lode is being done with all dispatch possible. I find the lode to-day is not looking so well for lead in the bottom of the stopes, though being squeezed by a floor of hard stone on the hanging, and a short cut in the foot wall. This no doubt is only temporary, and the

good work. Report. We estimate the raisings for April at 200 tons. The tributors returned 120½ tons of ore in the past month.

BARANQUES.—Joseph Garland, April 7: I have to report good progress last month driving the 34 cross-cut from the engine-shaft, 3 fms. 4 ft. 8 in. having been advanced, and that the lode was intersected on the 30th cut, at a distance of 2 ft. from the shaft, the distance corresponding very nearly with that of the 2nd cut, this showing the regularity of the lode in underlie. I regret to have to add, however, that owing to the breaking of the bed of the pump, the engine on Good Friday the water was unavoidably let in, rendering the bottom of the mine inaccessible; and although we have temporarily repaired the pump and resumed pumping we have to work the engine so rapidly that we are only able to fork the water at a very slow rate. The fact that we have an increase of water with the cutting of the lode militates against rapid working. Unfortunately the mishap to the engine happened before we had penetrated far enough into the lode to determine its character and value. We hope to have the water out and to resume cutting through the lode on Friday; all particulars shall be sent you as soon as the footwall is reached. The lode in the back of the 24 continued to yield good ore throughout the month, chiefly over the point of intersection in the 24. This and other circumstances lead us to expect to find the lode productive at the latter depth, and make us anxious to cut it through without delay. Ground stopped in March 21 square metres.

BURN VENTURA.—April 8: In the 10 and 20, driving east of Taylor's engine-shaft, the tributors have returned a fair quantity of ore, notwithstanding the difficulties caused by the heavy rain and a great increase of water. The lode in the 20, driving east of Contrabando shaft, is compact and promising, yielding 1½ ton per fathom. In the 30, driving in the same direction, the lode is in this level is opening out very well, producing 1 ton in a fathom. The lode in the 30, driving west of Contrabando shaft, is also of a promising appearance, but is not so large as the last named, its present worth being 1 ton per fathom. Contrabando shaft, sinking below the 20, is completed to the necessary depth of 30, and the level started east and west on the lode; sinking will be resumed for a fork or reservoir, the lode is worth 1 ton in a fathom. The work on the mine is working very well. The abundant rains and consequent increase of water in the mines interfered with the tributing rather seriously in the past month. The raisings of ore amounted to 50 tons.

BRASBERG COPPER.—John Daw, A. W. Daw, April 11: The 40, east of Marabou's lode, 3 ft. wide, present value 1½ ton per fathom. The 40 west of the lode is 3½ ft. wide, worth 1½ ton per fathom. We have six stops working in the 40, west of the lode, worth 1½ ton per fathom. The 40, west of the lode, 4 ft. wide, worth 1½ ton per fathom. The two stops working here, worth 1½ ton per fathom. The 10 west will yield 10½ ton of ore per fathom. We have five stops working here; they will yield 10½ ton of ore per fathom. As Daw's we have two stops working; they will yield 1½ ton of ore per fathom each. In No. 3, the lode is 3½ ft. wide, and will yield 1½ ton per fathom. We have two stops working in the back of this level worth 1½ ton per fathom each. No. 2, the lode is 2½ ft. wide, worth 1½ ton per fathom. We have seven stops in the back and five stops in the front of the level; they will average 10½ ton per fathom each. The 40, west of the lode, is working very well. The abundant rains and consequent increase of water in the mines interfered with the tributing rather seriously in the past month. The raisings of ore amounted to 50 tons.

CAJAL BIS GOLD.—Mr. Volvelder, March 11: No. 3 Shaft: We are going on in the most satisfactory manner, and the work of reconstructing reaches now 100 fms. so that, if no misfortune happens, in four weeks time we must reach the bottom of the old shaft.

CAL COPPER.—Capt. Lankbury and Henwood, Feb. 22: Ookiep: The ground in the 105 fm. level has been a fair quantity of ore, notwithstanding the slight improvement, and has since our last report presented a few signs of copper ore. The rock in the 83 cross-cut, north of No. 17 level, having been unfavourable for copper, it has been suspended, and the men put to stop in this driving in ground worth 4 tons of copper per fathom. The ground in the 83, south-east of new shaft, is composed chiefly of quartz containing spots of copper pyrites, but is not so favourable for driving. The 68 cross-cut, east of No. 2, produces saving stuff. The 58, east of No. 49 winze, produces saving stuff. The 26, south-west of new shaft, produces saving stuff. In consequence of proving the ground in the bottom of this level. **DEVALA MOYAR GOLD.**—Capt. Lankbury and Henwood, Feb. 25: The ground in the 85 level was entirely unproductive, and seeing that this driving has been extended beyond the vertical point of the productive ground in bottom of the 75, it has been suspended in favour of a cross-cut north-east of incline, which has been started in hard crystalline rock, but which will, we hope, lead to the continuation of the productive ground. Good progress has been made in driving the 85, west of the lode towards No. 1 winze, without yet discovering anything of importance. We have begun to cut down side of the 75, north-east of incline, and the work is progressing. The lode in the 75, north-east of incline, is passing through in this level, and is yielding stones of copper ore. The ground in the intermediate level, west of winze, contains spots of copper ore.

DEVALA MOYAR GOLD.—Capt. Lankbury and Henwood, February 28: The stops in the back of the 49 fm. level has slightly improved since last report, and is now yielding 1½ ton of copper ore per fathom. The rock in the new shaft sinking below the surface has declined in value, now producing only occasional stones of copper ore. We hope in a short time to effect communication with the 20 fm. level. The rock in No. 1 shaft sinking below the 38 continues to be of a good quality, and the lode is small and the granite very hard. The lode in the 20, driving east of O'Shea's engine-shaft, is a little more open than it was, and good progress is being made. In the 110, driving west of Lowndes' shaft, the lode is small and comparatively unproductive for opening-up, yielding ½ ton in a fathom. The lode in the 110, driving east of Lowndes' shaft, is disarranged, and a trial is now being made on the south part, which contains stones of ore. The men have made good progress in sinking Gracia's winze below the 10, but the work is now rendered difficult by an increase of water. **LOWND'S.**—The lode in the 175, driving east of Taylor's engine-shaft, contains small and unmeted. In the 175, driving in the same direction, an excellent piece of ore ground was opened-up in the past month, worth 3 tons per fathom. The lode in the 145, driving east of Taylor's engine-shaft, is a very compact and productive lode, producing 3 tons in a fathom. The men are getting on well with the sinking of Palgrave shaft below the 80. The usual quantity of ore was delivered into the stores in the past month, during which there was no change of importance in the productiveness of the stops. The works at surface are kept on with perfect regularity, and the machinery is in good condition. We estimate the raisings for April at 75 tons. The tributors returned 10 tons of ore in the past month.

DEVALA MOYAR GOLD.—Manager, March 23: Salomon's Reef: We have taken the reef in the 500 ft. level, and the quartz gives good prospects of gold. It is without doubt the eastern leg of the reef in which are 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000, 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1080, 1090, 1100, 1110, 1120, 1130, 1140, 1150, 1160, 1170, 1180, 1190, 1200, 1210, 1220, 1230, 1240, 1250, 1260, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1340, 1350, 1360, 1370, 1380, 1390, 1400, 1410, 1420, 1430, 1440, 1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, 1580, 1590, 1600, 1610, 1620, 1630, 1640, 1650, 1660, 1670, 1680, 1690, 1700, 1710, 1720, 1730, 1740, 1750, 1760, 1770, 1780, 1790, 1800, 1810, 1820, 1830, 1840, 1850, 1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980, 1990, 2000, 2010, 2020, 2030, 2040, 2050, 2060, 2070, 2080, 2090, 2100, 2110, 2120, 2130, 2140, 2150, 2160, 2170, 2180, 2190, 2200, 2210, 2220, 2230, 2240, 2250, 2260, 2270, 2280, 2290, 2300, 2310, 2320, 2330, 2340, 2350, 2360, 2370, 2380, 2390, 2400, 2410, 2420, 2430, 2440, 2450, 2460, 2470, 2480, 2490, 2500, 2510, 2520, 2530, 2540, 2550, 2560, 2570, 2580, 2590, 2600, 2610, 2620, 2630, 2640, 2650, 2660, 2670, 2680, 2690, 2700, 2710, 2720, 2730, 2740, 2750, 2760, 2770, 2780, 2790, 2800, 2810, 2820, 2830, 2840, 2850, 2860, 2870, 2880, 2890, 2900, 2910, 2920, 2930, 2940, 2950, 2960, 2970, 2980, 2990, 3000, 3010, 3020, 3030, 3040, 3050, 3060, 3070, 3080, 3090, 3100, 3110, 3120, 3130, 3140, 3150, 3160, 3170, 3180, 3190, 3200, 3210, 3220, 3230, 3240, 3250, 3260, 3270, 3280, 3290, 3300, 3310, 3320, 3330, 3340, 3350, 3360, 3370, 3380, 3390, 3400, 3410, 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DEVALA MOYAR GOLD.—Manager, March 23: Salomon's Reef: We have taken the reef in the 500 ft. level, and the quartz gives good prospects of gold. It is without doubt the eastern leg of the reef in which are 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000, 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1080, 1090, 1100, 1110, 1120, 1130, 1140, 1150, 1160, 1170, 1180, 1190, 1200, 1210, 1220, 1230, 1240, 1250, 1260, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1340, 1350, 1360, 1370, 1380, 1390, 1400, 1410, 1420, 1430, 1440, 1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, 1580, 1590, 1600, 1610, 1620, 1630, 1640, 1650, 1660, 1670, 1680, 1690, 1700, 1710, 1720, 1730, 1740, 1750, 1760, 1770, 1780, 1790, 1800, 1810, 1820, 1830, 1840, 1850, 1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980, 1990, 2000, 2010, 2020, 2030, 2040, 2050, 2060, 2070, 2080, 2090, 2100, 2110, 2120, 2130, 2140, 2150, 2160, 2170, 2180, 2190, 2200, 2210, 2220, 2230, 2240, 2250, 2260, 2270, 2280, 2290, 2300, 2310, 2320, 2330, 2340, 2350, 2360, 2370, 2380, 2390, 2400, 2410, 2420, 2430, 2440, 2450, 2460, 2470, 2480, 2490, 2500, 2510, 2520, 2530, 2540, 2550, 2560, 2570, 2580, 2590, 2600, 2610, 2620, 2630, 2640, 2650, 2660, 2670, 2680, 2690, 2700, 2710, 2720, 2730, 2740, 2750, 2760, 2770, 2780, 2790, 2800, 2810, 2820, 2830, 2840, 2850, 2860, 2870, 2880, 2890, 2900, 2910, 2920, 2930, 2940, 2950, 2960, 2970, 2980, 2990, 3000, 3010, 3020, 3030, 3040, 3050, 3060, 3070, 3080, 3090, 3100, 3110, 3120, 3130, 3140, 3150, 3160, 3170, 3180, 3190, 3200, 3210, 3220, 3230, 3240, 3250, 3260, 3270, 3280, 3290, 3300, 3310, 3320, 3330, 3340, 3350, 3360, 3370, 3380, 3390, 3400, 3410, 3420, 3430, 3440, 3450, 3460, 3470, 3480, 3490, 3500, 3510, 3520, 3530, 3540, 3550, 3560, 3570, 3580, 3590, 3600, 3610, 3620, 3630, 3640, 3650, 3660, 3670, 3680, 3690, 3700, 3710, 3720, 3730, 3740, 3750, 3760, 3770, 3780, 3790, 3800, 3810, 3820, 3830, 3840, 3850, 3860, 3870, 3880, 3890, 3900, 3910, 3920, 3930, 3940, 3950, 3960, 3970, 3980, 3990, 4000, 4010, 4020, 4030, 4040, 4050, 4060, 4070, 4080, 4090, 4100, 4110, 4120, 4130, 4140, 4150, 4160, 4170, 4180, 4190, 4200, 4210, 4220, 4230, 4240, 4250, 4260, 4270, 4280, 4290, 4300, 4310, 4320, 4330, 4340, 4350, 4360, 4370, 4380, 4390, 4400, 4410, 4420, 4430, 4440, 4450, 4460, 4470, 4480, 4490, 4500, 4510, 4520, 4530, 4540, 4550, 4560, 4570, 4580, 4590, 4600, 4610, 4620, 4630, 4640, 4650, 4660, 4670, 4680, 4690, 4700, 4710, 4720, 4730, 4740, 4750, 4760, 4770, 4780, 4790, 4800, 4810, 4820, 4830, 4840, 4850, 4860, 4870, 4880, 4890, 4900, 4910, 4920, 4930, 4940, 4950, 4960, 4970, 4980, 4990, 5000, 5010, 5020, 5030, 5040, 5050, 5060, 5070, 5080, 5090, 5100, 5110, 5120, 5130, 5140, 5150, 5160, 5170, 5180, 5190, 5200, 5210, 5220, 5230, 5240, 5250, 5260, 5270, 5280, 5290, 5300, 5310, 5320, 5330, 5340, 5350, 5360, 5370, 5380, 5390, 5400, 5410, 5420, 5430, 5440, 5450, 5460, 5470, 5480, 5490, 5500, 5510, 5520, 5530, 5540, 5550, 5560, 5570, 5580, 5590, 5600, 5610, 5620, 5630, 5640, 5650, 5660, 5670, 5680, 5690, 5700, 5710, 5720, 5730, 5740, 5750, 5760, 5770, 5780, 5790, 5800, 5810, 5820, 5830, 5840, 5850, 5860, 5870, 5880, 5890, 5900, 5910, 5920, 5930, 5940, 5950, 5960, 5970, 5980, 5990, 6000, 6010, 6020, 6030, 6040, 6050, 6060, 6070, 6080, 6090, 6100, 6110, 6120, 6130, 6140, 6150, 6160, 6170, 6180, 6190, 6200, 6210, 6220, 6230, 6240, 6250, 6260, 6270, 6280, 6290, 6300, 6310, 6320, 6330, 6340, 6350, 6360, 6370, 6380, 6390, 6400, 6410, 6420, 6430, 6440, 6450, 6460, 6470, 6480, 6490, 6500, 6510, 6520, 6530, 6540, 6550, 6560, 6570, 6580, 6590, 6600, 6610, 6620, 6630, 6640, 6650, 6660, 6670, 6680, 6690, 6700, 6710, 6720, 6730, 6740, 6750, 6760

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40 Denver Gold, 1s. 9d.	20 Montana, 34s.	10 Richmond, 23 5s.
30 East Rose, 3s. 3d.	25 Mysore Gold, 21 7s 6d	15 Schwab's Gully, 3 18 9
10 Ecton, 21s. 9d.	50 Nouveau Monde, 2s.	10 Tolima A,
50 Eberhardt, 2s. 6d.	30 Nundydroog, 6s. 6d.	25 Tolima B.
25 East Blue Hills, 7s. 3d	30 Nine Reefs, 3s. 9d.	100 Transvaal, 3s. 3d.
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50 Colorado, 22.	110 Mounts Bay, 3s.	100 North Tolima, 12s. 6d.
50 East Rose, 4s. 9d.	50 Mysore Gold, 25s.	40 Victoria, 9s. 3d.
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THE MINING JOURNAL, Railway and Commercial Gazette,

LONDON, APRIL 18, 1885.

MINING EXPLOSIONS—THEIR CAUSE AND PREVENTION.

The recent explosion at the Usworth Colliery, in the North of England, and those that have taken place on the Continent, have been the means of attention being directed to some of the causes which lead to such catastrophes, but which have hitherto scarcely been noticed. Shot-firing and naked lights have been dilated upon times out of number, but little has been heard with respect to the airways, on which the ventilation depends. Some of the return air courses, we are told, are mere holes, through which the men in some instances have to creep on their hands and knees to get through, and where this is the case, owing to the frictional resistance, the fresh air cannot sweep round all the working places as it ought to do. It is not only necessary that there should be a constant supply of fresh air going into a mine, but there should be ample means for the return air, charged with inflammable gas as it frequently is, escaping into the upcast shaft. The return airways, it is now held by some mining authorities, and not disputed by others, may, and in all probability has, brought about explosions of a serious character. Where the return air has not a free passage it soon becomes so charged with gas that it will readily ignite at a naked light or defective lamp. Therefore whilst there should be a constant current of fresh air sweeping through every part of a mine, and driving before it the vitiated air, there should be plenty of room for facilitating its exit to the atmosphere outside of the mine. It has been shown that in attempting to increase the ventilation of a mine without altering the airways, the resistance increases as the square of the velocity, so that if the velocity be doubled the resistance will be four times as great. But if the ventilation is increased by splitting the air current into two air ways of the same area and length, double the power is all that is required to double the ventilation when the shafts are adequate in area. It was by carrying out this principle at one large place in the North of England that the natural ventilation exceeded that at another mine in the same district where the ventilation was obtained by means of the furnace. The air-currents, we are consequently told, should be so arranged as to obtain the greatest assistance from the natural course of the air. In connection with this the water-gauge can be successfully brought into operation, for by it the effects of the enlargement of the air currents can be seen, for when there is a sudden rise of it that will indicate that there has been a fall of roof or other obstruction in the air ways, increasing the resistance of the air, and diminishing its quantity. But safety and for ensuring the health of the workmen, there should be good air courses, whilst the currents should be split in the best manner. Small faces and narrow air tubes really enable a man to breathe over again the same air, and where the return air cannot freely escape, then there is danger of an explosion. When the air ways are kept wide open, the main current of air can be increased to almost any amount required, but even with this, for safety sake there should be large open ways for the return air. In addition to these air ways, a good deal can be obtained by previously splitting the current. By having a separate split to ventilate each range of workings, the air is brought much purer and cooler to the miner in his working place. It may therefore be taken for granted that, with good ventilation, large and good return air courses, and the judicious splitting of air, there should be no stagnant mixture of gas and air of an explosive character. The groves, or places from which the mineral has been excavated, are frequently mere reservoirs of gas and air, only requiring a light to deal out death and destruction throughout a mine, and from these no doubt explosions have taken place. In some few instances these are closed by falls and the material sent into them, but when they are open they are frequently dangerous even in the best of ventilated mines. There are working places by the sides of these goaves, and, as a consequence, the gas at times will be driven on to them. Various means and appliances have been suggested, and in some instances attempted, for clearing these goaves of their dangerous accumulations of gas of an explosive description. Certain chemical agents having the property of

burning the gases have been tried, but ineffectually, whilst the gas has been set fire to at different places; but this was foul to be attended with great danger. More recently it has been suggested that bore-holes might be made from the surface, through which the gaseous mixture could ascend; but it is probable that the heavier air that would go down would force the lighter, carbonated hydrogen back, and so cause some of it to mix with the air and find its way into some of the working places, at thus become a source of danger. It would, under any circumstances, at some mines lead to a very heavy outlay, which miners, as things are at present, could not be expected to make. The more practical method, perhaps, would be to thoroughly ventilate the goaves, sweeping them most effectually with fresh air, and so clearing away the light gas which accumulates in them. With every facility for the forcing out of the return air in mines and the prevention of accumulations of gas in goaves, explosions would be less frequent than they are, and it would well if mine managers at home and abroad would now pay more attention to those two items in connection with mining operations than they have hitherto done.

OOREGUM GOLD MINING COMPANY.

An order of the Court having been obtained enabling this company to go out of liquidation, and to resume its business, conditionally on means being found for payment of its debts (estimated at about 8000*l.*), a meeting of the shareholders was held, on Monday, to authorise the directors to find the ways and means to continue operations. In framing the scheme for this purpose, the objects kept in view have been to provide an amount of working capital sufficient, after payment of the company's debts, to effect a satisfactory and workmanlike development of the property; to take the terms of the new issue attractive to the present shareholders, and to give every shareholder an opportunity of retaining his entire interest in the property, and to let those shareholders who decline to subscribe for the fresh funds retain such portion of their present interest as may be considered with the possibility of inducing others to do for them what they may decline to do for themselves. To achieve this latter object it has been arranged that the present ordinary shares will participate equally with the new preference shares in all profits beyond 12,000*l.* divided in any one year. Resolutions were passed authorising the capital of the company to be increased by the issue of 120,000 preference shares of 1*l.* each, which will be credited with 15s. per share paid, leaving 5s. per share to be paid in cash. These shares will be entitled to a cumulative dividend up to 10 per cent. on the nominal amount of each share, and to an equal participation with the ordinary shares in such further profits as shall remain for distribution each year after payment of the 10 per cent. preference dividend. The preference shares will be offered in the first instance to existing ordinary shareholders. We have on previous occasions alluded to the situation of this mine, and therefore it is not necessary to say much on this point, further than to point out that the Ooregum property is the only block intervening between the Mysore and Nundydroog Mines, and is traversed by the same lodes. The importance of this point will be better understood when it is remembered that striking success continues to attend the Mysore Gold Mining Company's operations, and that the Nundydroog Company have just succeeded in raising the requisite funds for the recommencement of work on their property. At the time operations were suspended on the Ooregum property the indications were of a nature to justify very sanguine hopes of success if greater depth could be obtained. Looking at all the circumstances of the case, we cannot help thinking that the shareholders will act wisely if they do not come forward with the needful fresh funds in order to thoroughly prove the capabilities of the mine. An additional encouragement is to be found in the fact that Mr. John Taylor, who is to be general manager, has expressed his entire confidence in the future success of the company if the work of development is thoroughly and properly carried out, and an opinion coming from him must carry great weight, seeing that he has exceptional means of obtaining information through Capt. Plummer, who has been so successful with the Mysore Company, and who is so thoroughly acquainted with the neighbouring properties.

RAILWAY ACCIDENTS IN 1884.

A Blue-book issued yesterday (Friday) morning contains returns of accidents and casualties reported to the Board of Trade by the several railway companies in the United Kingdom during the year ended December 31, 1884. In the 12 months the number of persons killed on railways was 1134 (as compared with 1167 in the previous year) of whom 135 were passengers, 546 servants of companies or contractors, 65 persons passing over level crossings, 348 trespassers and 40 persons not coming in the above classification. The number of injured was 4100 (as compared with 4187 in 1883), of whom 1491 were passengers, 2319 servants of companies or contractors, 27 persons passing over level crossings, 187 trespassers (including would-be suicides), and 76 persons not coming under these categories. In addition to the above, three passengers were killed and 114 injured while ascending or descending steps at stations; 39 injured by being struck by barrows, &c., on platforms; two killed and 50 injured by falling off platforms; and one killed and 58 injured from other causes. Of servants of companies or contractors, six were killed and 982 injured whilst loading, unloading, and shunting waggons; 223 were injured whilst moving goods in warehouses, &c.; three killed and 169 injured whilst working at cranes or capstans; three were killed and 322 injured by the falling of wagon doors, lamps, bales of goods, &c.; five were killed and 463 injured by falling off, or when getting on or off stationary engines or vehicles; six were killed and 233 injured by falling off platforms, &c.; and others were killed and wounded by various minor causes—making a total in this class of accidents of 52 killed, and 3023 injured. Thus, the total number of personal accidents reported by the railway companies during the year was 1186 killed, and 8023 injured.

Reporting on mining affairs in New South Wales, the *Sydney Morning Herald* of March 2 says that a recently discovered silver lode in the Carcoar district has yielded 1260 ozs. to the ton. "Many leases," observes the *Herald*, "have been taken up in the neighbourhood both for gold and silver mining. In silver mining Sonny Corner is coming well to the front: 1 ton of refined silver reached Sydney within the last few days, making 3 tons this year. A public silver ore-smelter is about to be erected on the field, which will tend still further to develop its riches. Another rich find is reported in the vicinity, the lode being said to be 9 ft. thick, the assay giving 1500 ozs. of silver to the ton. At Silverton the Apollon Mine has cut a lode at 202 ft., evidently a different one from that one which the shaft is down on the underlie, and whence so much good ore has been raised. This new lode is about 3 ft. thick, with very true walls, showing a steep underlie to the last. The assay of stuff at the back of the lode gave a return of 14 ozs., the lode ore not having yet been properly tested. This is looked on as a very important discovery, being below water-level and at the lowest depth at which silver has been found on the field. There are, also, strong indications that permanent lodes will eventually be found to exist in the Day Dream. The ore still averages from 700 ozs. to 2600 ozs. through the lode at 51 ft. A little excitement was caused when it became known that gold had been found in the deep shaft at Mount Browne, and several people have already started thence, and more are going. Fresh silver finds are reported occasionally from parts of the field.

The late rains at Bingera have given plenty of water for mining purposes, and the Australian Diamond Mining Company's dam is full. The company are at present connecting another portion of their mine with the washing machines by means of a tram line, which they expect to complete within a couple of weeks, when they will again commence washing. The part of the mine which has just been opened up looks very rich. Large quantities of copper are coming in from the Cobar and Nymagee mines.

The Mining Market: Metals, Ores, &c.

METAL MARKET—LONDON, APRIL 17, 1885.

IRON.	£ s. d.	£ s. d.	TIN.	£ s. d.	£ s. d.
Pigs, f.o.b., Clyde... 2 11 2	1 11 2		English, f.o.b., 50 lb...	52 0 0	—
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GENERAL REMARKS.

During the past week the various markets for metals have been a little fluctuating, but no very material changes have resulted. There has been a succession of advances and reactions, a hardening followed by a drooping tendency, but the ultimate result has been to leave the markets very much about the same as they were at the outset. The prevailing feeling has regulated prices to a very large extent, and they have advanced or receded chiefly in accordance as to whether the political horizon has been considered gloomy, or the reverse. Thus in the absence of unfavourable news prices have generally improved, but when advices pointing to uncertainty in the future have come to hand, then there has been a dull tone, and a marked disposition to realise, which has necessarily led to the acceptance of reduced prices. Further, in many quarters there is very little confidence placed in the permanency of any advance just now, be it ever so slight, and, therefore, after every such rise certain operators are anxious to secure their profits, although they may be only very small. The prospect is so very uncertain that to keep prompts uncovered is considered extremely risky. There must be better trade, and the country must be divested of its many political complications before higher prices can be established. If they advance now it is the mere outcome of a speculative movement, arising, perhaps, from the possibility rather than the probability of a temporary curtailment in supplies, or other feature which may spring up, and which is thought by operators likely to produce a favourable impression upon the market, but there are at present no substantial influences at work to give continued support to the market, and to cause a range of permanently better values. Until, however, something of this nature does occur there will be uneasiness in the tone, and the markets will continue depressed. It will require some very definite inspiration to rouse them; in fact, we might almost say that nothing except the demand suddenly overtaking supplies will bring about the necessary relief, and it is the absence of the probability of this which now causes so much indecision and hesitation throughout the trade. A decidedly unhealthy feeling prevails, and after every little fluctuation the markets drop back again, and despondency becomes more and more intensified. The uncertainty of war or not is the principal cause of this hesitation. It is thought by many that if war actually broke out the tone would be stronger than now; but whilst the suspense lasts the gloomiest views are entertained. If war with Russia is declared, then some impetus might be given to the demands for certain metals to meet military requirements. At all events, a better estimate of what is likely to be done might be formed, and the tone would, doubtless, be better than at present, when there is nothing definite or decided. It might almost be said that the suspense, lengthened and severe as it has been, is the ruin of the trade. The immense depreciation in values is causing some enormous losses to many traders, and it is evident that some holders must feel the pinch of constantly falling prices very keenly, and, therefore, anything that would break the prevailing gloom, any event that might brighten up the prospect even temporarily, would now on all sides be greatly appreciated. But for the present no such event seems at all probable, and it is more than possible that existing influences will continue for some time longer.

COPPER.

Still further reduced rates have again been accepted for Chili bars, and the tone of the market continues extremely sensitive. During the first two days of the week there was a continued crumbling away of prices, but on Wednesday there was a rally of 5s. per ton, but this little improvement was quickly lost, and the market has since been very depressed until to-day, when it has again recovered. Yesterday the Chili charters for the first half of the present month were advised as 1900 tons, and the shipments as 1500 tons. The exchange was telegraphed at 27½, and the price at Valparaiso as 43½ per ton, cost and freight to Liverpool. These returns naturally produced a very unfavourable impression upon the market here, and holders displayed even still more anxiety to part with their stocks than they had done before. Low as prices are, sales are freely effected, which naturally leads to the conclusion that the minimum may even yet not have been touched; but the more pacific rumours, however, have led to a fair advance during the day. The constantly reduced prices of the raw material have caused a further reduction in the value of manufactured, and yesterday smelters put down the price of strong sheets a further 2½ per ton, making the present price 56½, a concession which it is to be hoped may stimulate business, for most of the manufacturers are said to be very badly off for orders. There is such a shyness to do business, a disposition to hold off the market as long as possible, to keep orders in abeyance, to limit purchases to the most pressing requirements, that it is even a little doubtful whether the fall in price will stimulate the demand to any appreciable extent.

At all events, there is more probability of business being transacted at the reduced rate than if the quotation had been sustained at the former figure, and, in consequence, the reduction was very advisable, and it is to be hoped business may thereby be augmented beyond what is generally expected.

IRON.

There is still considerable quietude in the demand for all descriptions of iron, and business to meet the regular wants of the trade remains very dormant. Even the little extra briskness which characterised Scotch pigs has somewhat subsided, and there is no disposition evinced to follow up the slight advance effected a week or so back. This is the natural sequence of the reduced production being insufficiently minimised to prevent stocks accumulating; in fact, now there are only two furnaces less in blast than before the movement for curtailing the production was contemplated, and with the constantly limited shipments this is not enough to make more than a mere temporary favourable impression upon prices. Regular buyers will not follow up the rise, because they have little or no confidence in its stability. They see that stocks are accumulating, and they know prices must ultimately be governed by the question of supply and demand, whatever rates they may rule at for the time being from speculative influences. Even operators, however, will not be disposed to go on purchasing whilst this unfavourable characteristic continues to exist. There must be some inducement to purchase, some prospect that higher prices will be realised in the near future something tangible for operators to lay hold of, and then they may be encouraged to continue to effect purchases; but whilst supplies remain in excess of requirements, and all outward influences are against the progress of the markets, then the maintenance of quotations is more than doubtful. At the same time holders have so far not given way in their quotations materially, and for Scotch pigs they are still realising somewhat better prices than they were a week or two back; nevertheless slight concessions are being made, and the tendency just now is not to give support to the market, and we, therefore, may perhaps see a further crumbling away. The demand for makers' iron keeps particularly languid, consumers and shippers purchasing in a very hand-to-mouth manner, and prices are without any appreciable change. It is worthy of note that whilst prices for mixed numbers have been ruling at higher rates there has been little or no improvement in the value of makers' iron, thus signifying that the little more animate feeling has been due to speculative causes, and not from increased regular trade. The Glasgow warrant market was at its best at the opening on Monday, when the price quickly rallied from 41s. 11d. to 41s. 10d. On Wednesday the market was quiet and fairly steady at 41s. 10d. to 41s. 11d., and yesterday the tone was rather weaker at 41s. 10d. down to 41s. 9d., whilst to-day the market has been fairly strong, and the closing figure is 41s. 11d. to 41s. 12d. The shipments last week were 9870 tons, against 12,981 tons for the same week of last year, being a decrease of 3111 tons, and which makes the total shipments for the whole of this year 122,263 tons, against 152,740 tons for the same time of last year, and 164,660 tons for the similar period of 1883. There is one extra furnace in blast now than a week ago, the present total being 90, whilst the public stock has been further increased by 1276 tons, and now amounts to 593,629 tons, against 592,353 tons last week. The imports of Middlesbrough pig-iron into Grangemouth last week were 4625 tons, against 3060 tons for the same week of last year, being an increase of 1565 tons, and which makes a total increase for the whole of this year compared with last of 33,982 tons. There is very little change in the state of the Middlesbrough trade, political events throwing a gloomy influence over the whole market, and transactions are limited at about 34s. for No. 3 for prompt delivery. The public stock has undergone but little alteration, and the shipments last week were only about 15,000 tons. There is slightly more enquiry for manufactured, and prices are firm at 47. 17s. 6d. for common bars and ship-plates, and 47. 10s. to 47. 12s. 6d. for angles, and 67. 10s. per ton for sheets. The Wolverhampton market has remained dull, and business has been much restricted. List bars are, however, firm at 71. 10s., and common bars are likewise somewhat stronger at 57. 5s. to 57. 10s. Boiler-plates are quoted at 87. to 87. 10s., and sheets from 77. 15s. for lattens. Pigs are dull of sale, and 33s. is the price for common native sorts. The trade at Birmingham continues depressed; but a slightly healthier tone prevails the market. The export trade is particularly inanimate, owing to the unsettled state of affairs abroad. Most descriptions are in diminished request, but the principal enquiry is for sheets, horse-shoe iron, and galvanised sheets. Some fair sales are reported in pigs; but there is no change to record in prices.

TIN.

There has been a very fair market for tin during the past week, and business has been mostly transacted at improved prices. It is, however, a noteworthy feature that the higher prices have advanced the less disposition there has been to continue purchasing, clearly showing that the general confidence in the stability of the rise is not very great. When one metal advances whilst all others are receding, or at the best only remaining stationary, it is necessary to look into the origin, and to gather a clue from thence as to whether the advance is likely to be permanent. The rise is due mainly to excellent deliveries for the first half of the month. It is that which has given an impetus to the speculative demand, restored the drooping inanimate market to briskness, and even partial cheerfulness. It is the good deliveries which has in a measure re-established confidence, and prompted operators to purchase rather than sell, to "bull" rather than "bear" the market, and undoubtedly it is a solid foundation upon which to base anticipations of a better market in the near future. But it is not the only, or even the main question, that has to be taken into consideration. There never has been any cause for complaint of the actual amount of business doing to meet the regular wants of the trade. The past history of the trade is a clear proof of this; low as prices are now compared with the previous few years, deliveries have all along been well sustained, it making apparently no difference whether prices are high or low. There are other influences at work—the question of supply, and even that which has now a still greater effect, not only upon this, but upon all other markets, our grave political uncertainties. They cause the highest securities to diminish in value, and likewise cause depreciation in the most favourably situated commercial markets, and, therefore, whilst they continue to exist it is almost impossible for tin to be sustained at improved values, and the increased disposition to sell upon every slight advance is a clear evidence that this is the general opinion of the present state of the market. At the same time if peace is maintained, prices may improve, and the rumours of peace to-day have had a very favourable effect upon prices.

SPELTER.—This article continues very quiet, and the demand for the moment is slack. Ordinary brands are quoted at 137. 12s. 6d. to 137. 17s. 6d., and specials at 147. to 147. 2s. 6d. per ton.

LEAD is firmer, and business in Spanish has been done up to 407. 11s. 3d. We call the quotation for Spanish 107. 11s. 3d. to 107. 12s. 6d., and for English 107. 15s. to 107. 17s. 6d. per ton.

STEEL.—The market is steady, and some of the works are fairly busy. Some good shipments have been made to India, the

present price for which is 47. 15s. The price of steel-plates is about 77., and at Birmingham there is a very fair enquiry for steel bars and sheets.

TIN-PLATES are dull of sale at unaltered prices.

QUICKSILVER.—Realisations for second-hands continue, and it is not easy to effect sales to any extent.

Our usual telegram from Cornwall this evening says:—The Cornish smelters met this week, but decided to make no alteration in the standards. To-day, owing to the more favourable aspect of the political situation, the market is a good deal stronger, and both Dolcoaths and East Pools show an advance. Should tin remain firm, it is believed that the latter will give a dividend of 17. per share at the forthcoming meeting. The accounts presented at St. Just United, together with a 10s. call, created some surprise to many people; but it only illustrates further the variations of the mineral lodes in the locality. The call of 9s. made at Pedn-an-drea was also a surprise, as it was believed the mine was doing better. New Cook's Kitchen account is fixed for next week, when a small call will be necessary; but a rather heavy call is anticipated at South Crofty, which meeting takes place on the same day. At Dolcoath meeting a larger dividend is expected than that declared at the meeting three months since.

In the MINING SHARE MARKET the attention of the dealers has been chiefly directed to the settlement of the usual fortnightly account; a fair amount of business, however, has been transacted in a few prominent mines, and in some at advanced rates. There is evidently a greater disposition to speculate, and all that is wanted seems to be a better price for metals. The mines principally dealt in have been Prince of Wales, Wheal Grenville, East Blue Hills, Great Laxey, Leadhills, Wheal Basset, Devon Great Consols, and a few others.

This revival of interest in mining shares at the present, when trade in all its branches is paralysed by the political wind which daily changes between the four points, must be regarded more seriously than upon ordinary occasions, and is, we think, amply explained by the actual state of affairs now prevailing. In the event of a declaration of war it is clear that a sharp demand would at once follow, and it is not apparent that stocks generally are so large as to then satisfy even State requirements. On the other hand, advices all point to the continuance of the activity in the various Government manufacturing and constructing depots, where every effort is being made to facilitate the strengthening of the Navy by important additions, and the manufacture of large quantities of war matériel. Latest reports announce that the Government are prolonging the periods for which they have hired certain ships of the mercantile marine, and the orders at the constructive works to which we have alluded are such as will extend over some considerable time. Metals for these exceptional requirements cannot fail to be wanted in large quantities, more especially copper, lead, and tin; and, therefore, we think the anticipations of an advance in their value will soon be actually confirmed. So far as the political situation at present is concerned, defensive operations could not be more active than they now are; but no one doubts that in the event of war a marked rise would be speedily established all round.

TIN has been weaker during the week, but it has advanced towards the close. No change has been made in the standards for ore in Cornwall, though it was talked of, and feared early in the week that the smelters would reduce them. In shares a moderate business has been done in dividend mines, and rather more in progressive and speculative properties.

Carn Breas are quoted 3½ to 4½; the mine has improved in one or two points. Cook's Kitchens are quiet at 10 to 11; Dolcoath, 67 to 69; a small dividend is expected here at the meeting on the 27th. East Pool, 41½ to 42½; the meeting for a dividend will be held on the 20th. East Blue Hills have been in request, and leave off 6s. to 8s.; the shaft has improved, so far as the lode is carried in it, to 200. per fathom, and next week two ends at a new level, the 20, will be commenced in a rich lode. The prospects here are said to be greatly improving. New Kitty, 3 to 4; South Crofty, 2½ to 3½; South Frances, 8½ to 9½; Tincroft, 6 to 6½; West Basset, 3½ to 2½; Wheal Basset, 6½ to 6¾; West Frances are weaker at 9½ to 10½; but there is no change in the mine. West Kitty, 8½ to 8¾; Wheal Agar, 18 to 19; Wheal Grenville, 8½ to 9; Wheal Kitty (St. Agnes), 5 to 5½; Wheal Metal and Flow, 10s. to 15s.; South Condurow, 7½ to 8; at the meeting a dividend of 3s. per share was declared. The tin sold—147½ tons—realised 6675½ 6s. 9d., and showed a profit on four months' working of 785½ 1s. 6d. The average price of the tin sold was 45½ 4s. 2d. After payment of dividend, there remains a balance in hand of 2229½ 6s. 3d. Blue Hills ½ to ¾; a very good discovery has been made here. Drake-walls, 4s. to 6s.; Killifreth, 7s. 6d. to 10s.; Mounts Bay, 4 to 4½; New Cook's Kitchen, 2½ to 3½; Phoenix, 1 to 1½; Gooderever, 1 to 1½; Polberro, 2 to 2½; Treavevan, 3s. to 4s.; Trevaunance, 2 to 2½; West Godolphin, 1 to 1½; West Polbreen, 2 to 2½; Par Tin, 1 to 1½.

COPPER has been dull, but has now an upward tendency, and very little speculation has taken place in shares, which, with a few exceptions, remain at mere nominal prices. Bedford United are quoted ½ to 1; Devon Great Consols have been more in demand, at 1½ to 1¾; Gunnislake (Clitters), 5s. to 7s. 6d.; New West Caradon, 1s. to 2s.; West Seton, 3½ to 4; Wheal Crobar, 3 to 1. Prince of Wales have been largely dealt in, and advanced from 1s. to 4s., 6s. Some very rich tin, supposed to be from a new lode altogether, has been met with in the shaft, and a few days will show its character more clearly. Mellanear, 3 to 1; a dividend has been declared of 6d. per share. South Caradon, 4 to 5; Devon Friendship, 1s. to 2s.

LEAD is firmer at an advance of about 5s., and a few shares have been more in demand, particularly Great Laxey, Leadhills, and Roman Gravels. Vans are quoted 11s. 3d. to 13s. 9d.; Great Laxey has risen to 8½, 8¾. Roman Gravels, 2½ to 3½; the sale of lead ore this week, 125 tons, brought 944½ 7s. 6d. per ton. Leadhills, 1 to 1½. D'Eresby, 2 to 2½; this mine is looking better. Weardale, 1 to 1½; Ecton, 1 to 1½; Old Shepherds, 5s. to 7s. 6d.; South Darren, 4s. to 6s.; Standard Lead, 1 to 1½.

FOREIGN MINES are more than usually neglected, and there is very little business doing in comparison with a few weeks ago. Almada, 2s. to 3s.; Balkis, 2s. 3d. to 2s. 9d. Bratsberg, 10s. to 12s.; the points in operation are valued in the aggregate at 3890 10s. per fathom. Birdseye, 1½ to 1¾; Callao Bis, 9s. to 11s.; Cape Copper, 33 to 34; Chile Gold, 5s. to 7s.; Colorado, 1½ to 2½; Copiapo, 1½ to 1¾; Frontino and Bolivia, 6s. to 8s.; La Plata, 5s. to 6s.; Lisbon-Berlyn, 3s. to 4s.; Mysore Gold, 1½ to 1¾; Orita Gold, 7 to 1; Organos, 5s. to 7s. 6d.; Panulillo, 2 to 2½; Richmond, 3 to 3½; Santa Barbara, 1½ to 1¾; United Mexican, 3½ to 3¾; At Nedenes the stopes have improved, and are now valued collectively at 25 tons of 6 per cent. ore per fathom. The winze below the 40 is worth 3 tons per fathom. The smelting is going on well, and getting a good quantity of regulus. Oscar, 6s. 3d. to 8s. 9d.; a trial of 30 tons of ore from Daw's lode is being crushed, and from appearances it is expected that the result will be very satisfactory. Corporation of South Australia, 1s. 3d. to 2s. 6d.; Colombian Hydraulic, 7s. to 9s.; Schwab's Gully, 3½ to 4½; Tolima, A, 3 to 3½; Tolima, B, 2 to 2½; Victoria Gold, 8s. to 10s.; Western Andes, 4½ to 5.

Mining Notes.

THE Great Laxey dividend of 5s. per share will be paid next week.

SOUTH Wheal Frances shares have fallen to 8½, 9, but no change at the mine is reported.

THE half-yearly meeting of the United Mexican Mining Company (Limited) is fixed for the 6th May.

EAST Pool shares firmer, at 41½ to 42½. At the meeting, on the 20th inst., a dividend of 19s. to 20s. is expected.

THE Mellanear Copper Mine Company (Limited) have declared a dividend of 6d. per share, payable on the 30th inst.

IN West Phoenix, driving towards the Phoenix Mine, the lode looks exceedingly promising for meeting with a good deposit of tin.

WHEAL Crebor Mine is said to be looking exceedingly well, and a good discovery is likely to take place shortly at the bottom levels.

DOLCOATH shares are enquired for at 67½ to 68½. The meeting of shareholders will take place on the 27th inst., when a dividend of 1½ per share is expected.

THE result of the trial crushing of about 30 tons from Daw's lode is awaited with considerable interest by the Oscar shareholders. Something good is anticipated.

AT Drakewalls Mine the lode in the engine-shaft continues to look well, as reported by the agent, at a value of 12½ per fathom for tin, with more tin branches on the north part of the lode.

IT has been resolved to wind up voluntarily the Meteor Diamond Mining Company (Limited), with Mr. E. R. Tymms, the secretary of the company, as liquidator, and his remuneration to be 105½.

AT Blue Hills Mine a good improvement is reported at the 66 east, where the lode is valued at 25½ per fathom in whole ground to the adit level, which will add materially to the future prospects of the mine.

AT Barnsley, on Wednesday, Mr. Henry Lodge, owner of the Ryhill Colliery, Barnsley, was fined 5½, and costs for a breach of the Mines Regulation Act, and Mr. Sutcliffe, certificated manager, 40s. and costs.

THE operations at the different mines owned by the Weardale Company are being pushed forward with all speed, and with satisfactory indications. The men are also making good progress with the dressing of ore.

ROMAN Gravels have been in demand this week, and, as will be seen by the report of the manager, the mine continues to open out well. The half-monthly sale of lead ores on Thursday last realised 944½ 7s. 6d.

AT a meeting, on Thursday, of the Aruba Island Gold Mining Company a resolution was passed authorising the board to compromise an action which has been pending between the company and one or two parties.

THE directors of the United Mexican Mining Company have received the following telegram:—"Excess of returns over outlay on the mine of San Cayetano de la Ovejera for the week ending 11th April, \$5000. Two holidays."

AT Kit Hill Great Consols the agent states the lode in the 110 east is 5 ft. wide, and in the end driving west 2 ft. wide, with a leader of peach carrying mundle; and although not rich for tin is, notwithstanding, a very promising looking lode.

THE Bratsberg Copper Mines are reported looking well throughout. The value of the whole of the bargains enumerated in the monthly report is 389½ 10s. A cargo of ore per John Evans has just been delivered on the Tyne.

THE Montana Company (Limited) have received from the manager at the mine the following telegram:—"Second week in April crushed 675 tons, yielding \$14,460. We remit by telegraph to-morrow 8000½ sterling net to your credit with Smith, Payne, and Smiths."

LEADHILL shares have been in good demand and have advanced. The bottom levels are reported to be looking well, more especially in driving south in the bottom level, where the value continues to be reported at 4½ to 5 tons per fathom—a fine wide and rich lode. This is a distinct new run of ore ground.

THE Chairman of the Akankoo (Gold Coast) Mining Company states:—"All that is now needed is to raise the balance of the debenture capital, wherewith to purchase the pumping machinery needed for the sinking of the shaft, to place the company at an early date in a dividend-paying condition."

A MEETING of the Accidents in Mines Commission was held, on Tuesday and Wednesday, at its offices, 2, Victoria-street, Westminster. There were present the Chairman, Mr. Warington W. Smyth, F.R.S., Sir Frederick Abel, C.B., F.R.S., Mr. Thomas Burt, M.P., Professor Clifton, F.R.S., and Sir George Elliot, M.P.

A VERY favourable report has been received from the Nedenas Copper Mines this week. The stopes are looking better, valued in the aggregate at 25 tons, and the winze in the 40 is worth 3 tons 6 per cent. copper ore. The smelting operations are going splendidly. Mr. Daw states, and a good quantity of regulus is being made.

RESOLUTIONS have been passed to wind-up voluntarily the Harehope Gill Mining Company (Limited), with Mr. G. E. MacCarthy as liquidator, the remuneration of the liquidator to be at the rate of 20 per cent. on the amount which may be returned to the shareholders, exclusive of all costs, charges, and expenses properly incurred.

THE developments at the Lord Byron Mine, Ruby and Dunderberg, are progressing satisfactorily; but until the shaft from the tunnel level has been finished the output from this mine is not likely to increase, as the ore at the lowest point of the mine will not be extracted till this work is completed. There is no change at the Dunderberg Mine.

THE directors of the Callao Bis Gold Mining Company (Limited) have received advice from Mr. Volveder, dated the 11th ult., as follows:—"No. 3 Shaft: We are going on in the most satisfactory manner, and the work of reconstruction reaches now 150 ft. deep, so that if no misfortune happens, in four weeks' time we shall reach the bottom of the old shaft."

THE shareholders in the North Mexican Silver Mining Company (Limited) who call at that company's office, have now ocular demonstration of the efficient manner in which their employers in Mexico are carrying out the operations. Men who could prepare the plan of proposed tramways as that just received at the office should be capable of making the undertaking a success.

THE directors of the Santa Barbara Gold Mining Company (Limited) have a cable message from Rio de Janeiro, dated the 11th instant, advising the amount of produce obtained for the month of March as being 2400 oitavas of gold. The value of this produce would amount, at 8s. 6d. per oitava, to 1020½ sterling.

THE directors of the Pitangui Gold Mining Company (Limited) have a cable message from the agents of the company in Rio de Janeiro, dated the 11th instant, advising the amount of produce obtained for the month of March as being 1000 oitavas of gold. The value of this produce would amount, at 8s. 6d. per oitava, to 425½ sterling.

TESTS have proved that 1 lb. of powder in small blasts will loosen about 4½ tons of rock, and in large blasts about 2½ tons. In a day of 10 hours one man can bore with a bit 1 in. in diameter from 50 to 100 in. deep in granite, or from 300 to 400 in. in limestone.

THE report of the committee of management of the Transvaal Gold Exploration and Land Company states:—"After carefully considering the whole position, the committee have come to the conclusion that the best course to pursue to enable them to carry out their views and provide the funds that may possibly be required is to recommend to the shareholders to liquidate this company, and to promote the incorporation of a new company, to which the shareholders of this company shall have the right to subscribe."

A FIRE broke out on Saturday at the Granville Colliery, Rowley. The horses were immediately sent to the surface, or they would have been suffocated by the smoke. The fire was discovered in the workings, and it was found necessary to obtain a plentiful supply of water to extinguish it. The damage is considerable, but no personal injuries have been sustained.

THE Rio Tinto Company will recommend at the meeting on the 5th proximo a final dividend—subject to audit—of 6s. per share, making with the interim dividend of 10s. paid in November 16s. per share, or 8 per cent. for the year. They write off for amortisation of bonds 43,980½, and for depreciation of plant 19,224½, and carry forward to new account 30,113½.

THE New Albion Gold Mining Company (Limited) have received the following telegram from the Hon. William Annand, dated Halifax, Nova Scotia, 6th inst.:—"Titles perfectly in order, and the property has been duly transferred into the name of the company. Have arranged that all proceeds from March 25 become our property; 160 tons quartz crushed March, yielding 340 ozs. of gold."

A DIVIDEND of 3s. per share was declared at the meeting of adventurers of South Condurrow, on Wednesday last. The mine continues to open out well, and several of the points are promising. The cost of returning the tin has been low, and the same remark applies to the price obtained for the tin. A good deal of tutwork has been and is still being done in opening out levels east and west on the course of the lodes, as well as in sinking winzes and rising in the backs of the respective levels with the view of making fresh discoveries.

MR. John Bright, in a letter to a Durham elector, on the question of class legislation and labour candidates, states that he would not vote for a candidate merely because he was a labourer, a merchant, or mineowner, but because he was likely to be, and was the most qualified to be, a representative of the people in the Legislature. What was wanted was a body of honest men, intelligent in understanding the interests of the nation, and zealous in protecting them.

A VERY rich silver find has been made at Silverfield. The assays of the chloride show from 1500 to 20,000 ozs. of silver to the ton, and that no assay has been less than the first-named quantity. Some of the other ore has assayed 2000 ozs. to the ton. The original prospectors of this silver country were Messrs. Prentice Brothers, and the many specimens they brought in from the locality were considered by experts to be remarkably rich, but the assays were insignificant as compared with the present find. The circumstance has caused considerable excitement.

A DISCOVERY of alluvial gold has been made in the Waikato district, New Zealand. Two men washed 8 ozs. of coarse gold out of the bed of a creek in a short time. They banked the gold, but refuse to divulge the locality until their prospecting area has been defined.—Rose Valley: Webb and party have finished a washing which yielded 15 tons of tin. Five men produced this quantity of metal in seven weeks, a fact which speaks highly for the future prospects of the party.

WRITING from the Transvaal to his brother in Scotland, Mr. J. J. Hamilton says:—"Balkis shares will rise within two months. Crushing is now going on regularly, and a telegram will go before end of month advising returns of fully 1½ to 2 ozs. per ton, and besides, the gold will be shipped. I have got the machinery, and all I require now, and will be in full work within a fortnight, and will keep my promise of paying back, or at least sending off gold sufficient to pay back the subscribed capital before the end of the present half-year."

AT a meeting of shareholders in the Transvaal Gold Exploration and Land Company yesterday, a discussion which lasted nearly four hours took place, in the course of which a great deal of personal and irrelevant matter was introduced. It was, however, generally admitted that the disasters which the company have met with are in no way attributable to the committee, who are the largest sufferers by the non-success of the venture, so far. In the result it was decided to reconstruct on the terms specified in our report and proceedings in another column. The new company will have a nominal capital of 300,000½, in 1½ shares, issued with 18s. per share credited as paid-up, leaving a liability of 2s. per share.

THE great publicity given South to the silver discovery at Silverfield is already exciting considerable interest, and will certainly result in a large addition to the population. The local papers have, of course, alluded to the find, but have been chary in their observations on the grounds that a really good thing requires but the facts to make itself known, and that it is yet too early to venture on details. Experience has always taught the necessity of prudence when venturing upon publishing exciting news that is likely to cause a rush. That some excellent silver claims have been discovered at Silverfield on leases is well known, and that the Albion is considered a bonanza is public property. Four or five other claims are also mentioned as likely to become

valuable properties, and there is reason to hope that others will be brought to light. That the district will be greatly benefited by the discovery, and a rush is likely to set in, is foretold by one of the principal business men, at Port Douglas.—*Herberton (Queensland) Advertiser.*

THE *British Australasian* has a telegram announcing a discovery of coal at Hergott Springs, in South Australia, and remarks:—"If only the coal seam at Hergott Springs should prove workable and of sufficiently good quality, it would be an almost incalculable advantage to the colony. Hergott Springs is the station at the head of the Northern Railway, where the boring operations carried on some few months ago by means of the diamond drill resulted in the striking of excellent water at a depth of 380 ft. If here in the far interior, and, in addition to water, there be now added coal which it will pay to work, Hergott Springs will be destined to advance rapidly in importance."

DEVON Consols shares have advanced to 1½, 2½. It would appear that according to the samples taken of 8 tons of the lode in the 220, west of Railway shaft, it has been found to yield 13 lbs. of tin per ton of stuff. This shows a great improvement in the lode as found in the level above, where there were only traces of tin, clearly showing the great expectations now formed that in sinking deeper a rich tin mine may here be opened out underneath the great courses of copper ore similar to what has been found in the Dolcoath and East Pool Mines districts of Camborne and Redruth, in the western part of Cornwall. The monthly sampling of copper ores amounts to 800 tons, and which is for sale next week. In sinking the shaft at the Wheal Maria part of the mine, which is now down 12 fathoms below the adit level, the lode looks well for a good discovery of ore.

THE Anaconda Company (Montana) is now (March 18) working between 600 and 700 tons of ore per day, and shipping daily almost 100 tons of copper matte; but not content with present facilities it is also preparing for the erection of a second large concentrator a mile below the present plant, and grading for a railroad for the transportation of ore and concentrates. This is a cheering prospect. Taking into consideration its wood contracts, the Anaconda Company is now giving employment to 1500 men in this and Deer Lodge Counties, and undoubtedly it supports in Butte and Anaconda fully 5000 people. Thus is afforded some idea of the immensity and the beneficial results of the Anaconda Company's operations. That such a concern could exist except by adherence to the strictest business principles, and under the direction of a master of finance like Mr. Haggins, aided by capable lieutenants, is absurd.

LETTERS have just been received from the Akankoo (Gold Coast) Mine of an important character. The shareholders will recollect that the statements made by Mr. Lane at the meeting of shareholders held on the 8th November last were of a most discouraging nature. He reported that the natives had taken out practically all the payable ore above the tunnel, and the quality of the ore which had been got out of the stopes was so poor as scarcely to pay expenses. The boiler also which he had ordered proved to be useless for the work, and a new boiler was, therefore sent out, entailing great delay in working the machinery, and consequently loss to the company in depriving them of the benefit even of the ore to which Mr. Lane referred. As the shareholders know, Mr. C. J. Harvey, the mining engineer, one of the directors recently appointed, undertook to proceed to the mine, and arrived there on the 4th January last. From that time until the 3rd of March last—the date of letters just received from him—he has been steadily proceeding in his work of putting the mine in order and ascertaining its value, and these letters establish beyond a doubt its valuable character. From these letters, and from the information given verbally by a miner and others who have just returned from the mine, the following satisfactory features are clear. First as to the present position of the mine:—1. That the new boiler is thoroughly successful, working the engine at full pressure. 2. That 20 heads of stamps are now erected, and by this time are no doubt in full work day and night. 3. That the engine and boiler are sufficient to work 30 heads of stamps, enabling an additional 10 heads of stamps, when sent out, to be worked by the same machinery. 4. That there is a large quantity of quartz already at bank, and that there is ample quartz above the tunnel level, when the present ore extracted is used up, to keep the mill going at full speed day and night for an indefinite period. 5. That certain economies can be effected in the working of the mine which will immediately be done, and that Mr. Harvey is of opinion that it can be worked at a profit with a return of 6 dwts. to the ton. 6. That the work which can now be done by the stamps already erected, even if the ore yields only the average hitherto attained—viz., 6 dwts. 12 grs. to the ton—will, it is expected, cover all the working expenses of the mine. Meantime 162 ozs. of gold have just been shipped from the mine, and are now in London at the Bank of England, of the value of about 600½. The next point is the all-important question of what results have followed the sinking of the winzes by Mr. Harvey below the tunnel. Three shafts or winzes were sunk by him, until stopped by the water, which, of course, it was foreseen would eventually be met with, but which is of no importance from a mining point of view, being easily got rid of when pumping machinery is erected as in all other mines. Continuing the sinking on the original "Prospect shaft," Mr. Harvey has extracted 8 tons 14 cwt. of quartz, which was separately crushed in the mill, and yielded 9 ozs. 13 grs., equal to 1 oz. 2 dwts. 7 grs. per ton, thus clearly proving the rich and valuable character of the mine; and it is a remarkable fact that the actual crushing in the mill of the ore just taken from the Prospect shaft corresponds with the assay value of the samples brought home by Mr. Cornish, in 1881, from the same shaft, thus showing the correctness of the same. From the next shaft, called No. 1 winze, 12 tons 1 cwt. were extracted, which was also separately crushed, and has yielded 4 ozs. 1 dwt. 4 grs., equal to 6 dwts. 18 grs. per ton, and from the third shaft, which is called No. 2 winze, 8 tons 3 cwt. of quartz were extracted and separately crushed, which has yielded 2 ozs. 16 dwts. 22 grs., equal to 6 dwts. 23 grs. per ton. It will be seen, therefore, that as Mr. Harvey states, that the mine can be profitably worked at a profit even with ore of not more than 6 dwts. to the ton, assuming that sufficient ore can be got out of the quality of the ore at the Prospect shaft—viz., 1 oz. 2 dwts. 7 grs.—to keep the mill at work, it will result in very large profits being earned by the mine. But even if only the average of the three winzes is taken they yield 11 dwts. to the ton, which also must return large profits, inasmuch as everything above 4 or 5 dwts. (which would pay all expenses of the mine), would be net profit to the company. All that is now needed is to raise the balance of the debenture capital wherewith to purchase the pumping machinery needed for the sinking of the shaft to place the company at an early date in a dividend-paying condition. The directors do not propose taking any steps whatever in this direction until the arrival of Mr. Harvey, who may be expected in London at the close of the present month. As soon as he returns it is his intention at once to call the shareholders and debenture-holders together, to enable Mr. Harvey to explain to them direct his views with regard to the future of the company; and they feel assured the proprietors will share with them their satisfaction at the satisfactory news to hand.

STOCK AND SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
12000 Bedford Unit, c, Tavis. (£1 lib.)	0 14	0 0	3 3/4	0 1	0 0	Nov. 1884
4000 Carn Brea, c, T. Illogan	14 15	0 0	3 3/4	52 11	0 0	Nov. 1884
4000 Craignant Bch., c, Cardigan	0 0	0 0	3 3/4	0 0	0 0	Nov. 1884
12000 Devon Gr. Consols, c, Tavisstock	10 14	0 0	3 3/4	118 7	0 0	Dec. 1884
4000 Dolcoath, c, T. Illogan	0 9	0 0	3 3/4	42 2	0 0	Jan. 1885
4000 Great Holway, c, Flintshire	0 0	0 0	3 3/4	0 12	0 0	7 Sept. 1883
12000 Great Laxey, c, Isle of Man	4 0	0 0	3 3/4	30 13	0 0	5 Apr. 1885
4000 Green Hurth, c, Durham	0 0	0 0	3 3/4	5 1	0 0	5 Dec. 1884
9250 Gunnsale (Clitters), c, T. Illogan	2 2	0 0	3 3/4	0 19	0 0	2 Mar. 1882
2000 Isle of Man, c, Isle of Man	25 0	0 0	3 3/4	83 5	0 0	1 Sept. 1880
2000 Killfret, c, Chacewater	4 11	0 0	3 3/4	0 14	0 0	2 Nov. 1883
2000 Leadhills, c, Lanarkshire	11 0	0 0	3 3/4	0 0	0 0	1 Sept. 1884
2000 Levant, c, St. Just	18 15	0 0	3 3/4	0 615	0 0	10 Oct. 1884
4000 Melanor, c, Hayle	2 0	0 0	3 3/4	2 4	0 0	6 Apr. 1885
12000 Minera Mining Co., c, Wrexham	7 5	0 0	3 3/4	69 14	0 0	2 Aug. 1884
4000 Mining Co. of Ireland, c, c, c	7 0	0 0	3 3/4	24 0	0 0	2 June 1880
12000 North Hendre, c, Wales	2 10	0 0	3 3/4	0 318	0 0	4 Nov. 1882
12000 Ditto	1 7	0 0	3 3/4	0 11	0 0	2 Nov. 1882
12000 Phoenix United, c, c, Linkinhorne	8 6	0 0	3 3/4	17 7	0 0	1 Apr. 1883
12000 Roman Gravel, c, Balph	7 10	0 0	3 3/4	9 13	0 0	1 Apr. 1885
6125 South Dunderrow, c, c, Camthorne	7 5	0 0	3 3/4	11 18	0 0	5 Apr. 1885
12000 South Dunderrow, c, c, Camthorne	11 6	0 0	3 3/4	8 3	0 0	2 Apr. 1885
12000 Tincroft, c, c, Pool, Illogan	14 12	0 0	3 3/4	6 14	0 0	5 Dec. 1881
12000 Van, c, Llandudno (in c.)	4 5	0 0	3 3/4	25 13	0 0	6 Jan. 1883
4000 West Basset, c, Illogan	8 0	0 0	3 3/4	28 3	0 0	6 Apr. 1882
4000 West Kitt, c, St. Agnes	0 12	0 0	3 3/4	318 0	0 0	9 May 1885
4000 Wheel Agar, c, Illogan	19 6	0 0	3 3/4	1 13	0 0	2 Mar. 1885
12000 Wheel Crebor, c, Tavisstock	2 4	0 0	3 3/4	1 3	0 0	2 Nov. 1883
12000 Wheel Eliza Consols, c, St. Austell	18 0	0 0	3 3/4	59 10	0 0	10 Nov. 1884
4000 Wheel Grenville, c, Camthorne	15 0	0 0	3 3/4	2 7	0 0	1 Mar. 1885
4000 Wheel Kitt, c, St. Agnes	6 12	0 0	3 3/4	12 18	0 0	1 Jan. 1881
4000 Wheel Peavor, c, Redruth	14 18	0 0	3 3/4	8 13	0 0	4 Mar. 1881

FOREIGN DIVIDEND MINES.

12000	Alamillos, c, Spain	2	0	0	1 1/2	1 1/2	2	17	11	0	1	3	Mar.	1885		
12000	Alameda and Tinto Consol., c, Spain	1	0	0	0	28	28	2	6	3	0	0	1	May	1876	
12000	Australian, c, South Australia	7	7	6	2	1	1	1	1	0	0	1	6	July	1884	
12000	Birdseye Creek, c, California	4	0	0	1 1/2	1 1/2	1	1	0	0	0	2	0	Dec.	1884	
12000	Bratsberg, c, Norway	2	0	0	3	10	12	2	4	4	0	1	2 1/2	Mar.	1884	
12000	California, c, Colorado	1	0	0	6	0	4	0	0	3	0	0	1	Aug.	1884	
12000	Cape Copper Mining, c, South Africa	8	0	0	35	33	34	61	17	6	1	0	0	Mar.	1885	
6000	Colorado United, c, Colorado	5	0	0	2	1	2	1	14	6	0	1	0	May	1885	
6000	Copalco, c, Chile (44 shares)	3	3	0	2	1	1	8	9	0	0	1	0	Mar.	1885	
12000	El Callao, c, Venezuela (foreign)	40	0	0	70	65	70	36	16	0	0	0	16	0	Mar.	1884
12000	English and Australian, c, c, c, Australia	10	0	0	—	—	—	2	3	0	8	0	0	0	Mar.	1884
12000	Eng. Aus. & Viet., c, pref. (20000 c.)	1	0	0	—	—	—	3	0	8	0	0	3	Apr.	1882	
12000	Fortuna, c, Spain	2	0	0	3	2	3	3	17	1	0	2	10	Mar.	1885	
12000	Frontino & Bolivia, c, New Gran.	1	0	0	3 1/2	68	88	2	12	0	0	1	0	Dec.	1883	
12000	La Plata, c, Levallois	1	0	0	5 1/2	58	88	0	6	6	0	0	7 1/2	Oct.	1882	
12000	Linares, c, Spain	3	0	0	4	3	4	19	16	10	0	3	6	Mar.	1885	
12000	Marbella Iron Ore, c, Spain	10	0	0	2 1/2	1 1/2	2 1/2	0	10	0	0	10	0	June	1882	
12000	Mason & Barry, c, Portugal	10	0	0	7 1/2	7 1/2	8	4	3	0	0	8	0	Oct.	1884	
12000	Montana, c, U.S.A.	2	0	0	1 1/2	1 1/2	1 1/2	0	8	0	0	0	8	July	1884	
12000	Oxford, c, Nova Scotia (foreign)	0	4	0	3	3	3	0	3	6	0	0	1 1/2	Mar.	1884	
12000	Quebrada, c, Land & Cop. Venezuela	10	0	0	2 1/2	3	1 1/2	6	9	0	0	2	0	May	1884	
12000	Rautavaara, c, Finland (in c.)	4	0	0	2 1/2	1 1/2	2 1/2	2	0	9	0	0	2	0	Mar.	1880
12000	Pitanguy, c, Brazil (in c. 6000 £1 pd.)	0	18	0	3	3	3	1	0	1	0	0	0	0	Sept.	1880
12000	Pontbasse, c, France	20	0	0	4 1/2	4 1/2	4 1/2	30	3	1	0	11	3	Dec.	1883	
12000	Port Phillip, c, Clunes (42 shares)	1	0	0	3 1/2	1 1/2	3 1/2	1	14	2	0	0	10	Feb.	1881	
12000	Rara Fortuna, c, Argent. Republic	1	0	0	—	—	—	3	0	0	0	0	1	July	1882	
12000	Richmond Consol., c, Nevada	5	0	0	3	3	3	15	1	6	0	0	5	Nov.	1884	
12000	Rio Tinto, c, Mortgage Bds., Huella	100	0	0	96	94	96	5	per cent.	0	0	0	0	Apr.	1885	
12000	Ditto, shares	10	0	0	10 1/2	9 1/2	9 1/2	4	16	0	0	10	0	Nov.	1884	
12000	Santa Barbara, c, Brazil	0	10	0	1 1/2	1 1/2	1 1/2	0	12	9	0	0	1	May	1882	
12000	Scottish-Australian Mining Co., c	10	0	0	4 1/2	4 1/2	4 1/2	20	per cent.	0	0	0	10	Oct.	1884	
12000	Ditto, New	1	0	0	1 1/2	1 1/2	1 1/2	20	per cent.	0	0	0	0	Oct.	1884	
12000	Sierra Buttes, c, California	2	0	0	1 1/2	1 1/2	1 1/2	2	7	0	0	0	6	Oct.	1884	
12000	Ditto, Plumas Eureka	2	0	0	1 1/2	1 1/2	1 1/2	3	3	6	0	0	1	Oct.	1884	
12000	St. John del Rey (45 Stock and multiple debt in c.)	62 1/2	0	0	67 1/2	67 1/2	67 1/2	5	p.c. for half-year, June 1882	0	0	0	0	6	Aug.	1882
12000	Tambachery, c, Wynad	1	0	0	3 1/2	1 1/2	3 1/2	0	6	0	0	0	6	Aug.	1882	
12000	Tharsis, c, c, Spain (587330 issued)	2	0	0	5	4	5	6	18	6	0	11	0	May	1884	
12000	Tolima, c, c, Colombia (A. Anares)	5	0	0	4	3	3	6	2	2	0	0	5	Jan.	1885	
6000	Ditto	5	0	0	2 1/2	2	2 1/2	1	5	3	0	0	5	Jan.	1885	
12000	Victoria (London), c, Australia	1	0	0	3	3	3	0	13	10	0	0	8	Feb.	1881	
12000	United Mexican, c, c, Mexico	9	17	0	3 1/2	3 1/2	3 1/2	0	6	6	0	2	6	Nov.	1884	
12000	Victoria (New Zealand), c, Deb. Bds.	5	0	0	5	4	5	4	16	3	0	10	6	Nov.	1884	
12000	Western Andes, c, Colombia	5	0	0	5	4	5	4	16	3	0	10	6	Nov.	1884	
12000	W. Prussian (5500 pref. sh. £10 pd.)	10	0	0	—	—	—	4	2	0	0	8	0	Apr.	1881	
12000	Yorke Pen., c, South Aust. Pref. (1 c.)	1	0	0	3 1/2	1 1/2	3 1/2	0	3	0	0	3	0	Apr.	1882	

Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares.	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
12000 Anderton, c, c, Devonshire	0 6	0 0	3 3/4	0 0	0 0	Nov. 1884
12000 Assheton, c, c, Carnarvonshire	5 0	0 0	3 3/4	0 0	0 0	Nov. 1884
3200 Blue Hills, c, c, St. Agnes	4 13	0 0	3 3/4	0 0	0 0	Nov. 1884
10000 Brad, c, c, Isle of Man	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
30000 British, c, c, Wrexham	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
20000 British Manganese Company	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
10000 Burnhope, c, c, Edmondbyers	5 5	0 0	3 3/4	0 3	0 0	2 1/2 3
40000 Swich United, c, c, Cardigan	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
12000 Colliambs Consols, c, c, Llanwrst.	0 2	0 0	3 3/4	0 0	0 0	Nov. 1884
50000 Carn Camborne, c, c, Camborne	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
37500 Carnarvonshire Cons., c, c, Llanwrst.	2 0	0 0	3 3/4	0 0	0 0	Nov. 1884
6400 Cashwell, c, c, Cumberland	2 19	0 0	3 3/4	0 0	0 0	Nov. 1884
6000 Cathedral, c, c, Gwynnapp	2 4	0 0	3 3/4	0 0	0 0	Nov. 1884
20000 Central Fardale, c, c, Isle of Man	1 18	0 0	3 3/4	0 0	0 0	Nov. 1884
300000 Clifford Amalgamated	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
25000 Ood-y-Fedw-Pant-y-Buarth, c, c	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
2450 Cook's Kitchen, c, c, Illogan	40 0	0 0	3 3/4	0 0	0 0	Nov. 1884
32007 Craven Moor Unit, c, c, Pateley Bdge	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
50000 Creiglog, c, c, Denbighshire	0 17	0 0	3 3/4	0 0	0 0	Nov. 1884
36400 Crook Burn, c, c, Cumberland	0 17	0 0	3 3/4	0 0	0 0	Nov. 1884
6000 Deer Park, c, c, Stoke Olmstead	2 9	0 0	3 3/4	0 0	0 0	Nov. 1884
12000 D'Eresby, c, c, Llanwrst. £1 share	0 10	0 0	3 3/4	0 0	0 0	Nov. 1884
12000 Derwent, c, c, Durham	4 0	0 0	3 3/4	0 0	0 0	Nov. 1884
60000 Devon Friendship, c, c, Tavisstock	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
12000 Devon Great United (21 shares)	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
50000 Drawakills, c, c, Calstock	0 15	0 0	3 3/4	0 0	0 0	Nov. 1884
50000 Duchy Peru, c, c, Cornwall	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
12000 East Blue Hills, c, c, St. Agnes	0 0	0 0	3 3/4	0 0	0 0	Nov. 1884
6000 East Botallack, c, c, St. Just	1 2	0 0	3 3/4	0 0	0 0	Nov. 1884
6144 East Caradon, c, c, St. Cleer	5 4	0 0	3 3/4	0 0	0 0	1 1/5
15000 East Devon Cons., c, c, Buckfastleigh	2 0	0 0	3 3/4	0 0	0 0	Nov. 1884
20000 East Long Rake, c, c, Wales	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
25500 East Roman Gravel, c, c, Salop	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
18000 East Van, c, c, Llanidloes	5 0	0 0	3 3/4	0 0	0 0	Nov. 1884
2048 East Wheel Lovell, c, c, Helston	3 6	0 0	3 3/4	0 0	0 0	Nov. 1884
10000 East Wheel Rose, c, c, Newlyn East	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
25000 Eton, c, c, Wotton	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
12500 Frognoch, c, c, Gargn (1000 sh. lib.)	2 0	0 0	3 3/4	0 0	0 0	Nov. 1884
12000 Gawton, c, c, Tavisstock	2 0	0 0	3 3/4	0 0	0 0	Nov. 1884
40000 Glas. Car. c, c, (30000 sh. lib., 10000 lib. pd.)	0 0	0 0	3 3/4	0 0	0 0	Nov. 1884
30000 Gobbett, c, c, Devon	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
10000 Gogdards, c, c, Carnarvon	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
10000 Gogdards, c, c, Cardigan	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
25000 Gogdards, c, c, Llanwrst.	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
6000 Great West Chiverton, c, c, Cornwall	0 6	0 0	3 3/4	0 0	0 0	Nov. 1884
50000 Great W. Shepherds, c, c, Cornwall	0 0	0 0	3 3/4	0 0	0 0	Nov. 1884
20000 Grogwinion, c, c, Cardigan	2 0	0 0	3 3/4	0 0	0 0	Nov. 1884
10000 Gwyn-y-Mynydd, c, c, Flint (pref.)	4 0	0 0	3 3/4	0 0	0 0	Nov. 1884
8400 Hardshill, c, c, Westmore (10s. sh.)	0 7	0 0	3 3/4	0 0	0 0	Nov. 1884
12000 Herodsfoot, c, c, near Liskeard	1 6	0 0	3 3/4	0 0	0 0	Nov. 1884
18000 Hingston Down, c, c, Calstock	0 13	0 0	3 3/4	0 0	0 0	Nov. 1884
10000 Holywell District, c, c, Flintshire	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
25000 Kilt Hill Gr. Cons., c, c, (24 sh.)	1 2	0 0	3 3/4	0 0	0 0	Nov. 1884
2400 New Killybeg, c, c, Llanwrst.	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
15000 Llandudno, c, c, Wales	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
6120 Lovell, c, c, Wendron	2 1	0 0	3 3/4	0 0	0 0	Nov. 1884
8000 Marke Valley, c, c, Linkinhorne	7 17	0 0	3 3/4	0 0	0 0	Nov. 1884
80000 Mena, c, c, Anglesa	5 0	0 0	3 3/4	0 0	0 0	Nov. 1884
20000 Mona Consols, c, c, Anglesa	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
20000 Mostyn Consols, c, c, Flint	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
12000 Morfa Du, c, c, Anglesa	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
80000 Mounts Bay, c, c, Breage	1 0	0 0	3 3/4	0 0	0 0	Nov. 1884
6144 Mount Carbis, c, c, Redruth	1 19	0 0	3 3/4	0 0	0 0	Nov. 1884
12000 New Caradon, c, c, St. Cleer	0 8	0 0	3 3/4	0 0	0 0	Nov. 1884

fallen 2½; North British, 2½; Glasgow and South Western 2½; Great North of Scotland, 2½. Brighton Deferred has fallen 3½, and South-Eastern Deferred, 2. Railway Investment Deferred Stock has gone from 19 to 17. North British Four per Cent. Debenture Stock has receded 2½, and the Four-and-Half per Cent. Stock, 3½. Canadians have improved considerably. In Americans, Chicago and Milwaukee, shares have risen ¾; Erie Second Bonds, 2½. In banks, Bank of Scotland has fallen 20s.; British Linen, 20s.; Royal has improved 40s. Scottish Union and National Insurance A shares have risen 2s. 6d. Scottish American Investment shares have fallen 1s. Scottish American Mortgage, 1s. 6d.; Scottish Mortgage and Land of New Mexico, 1s. 3d. North British Canadian Investment are quoted at 34s. ex div., at which they show a fall 1s. 6d., after allowing for dividend. Canada North West Land shares have fallen 1s. Mission Land and Live Stock, 6d. Swan Land and Cattle has risen 1s. Western Ranches have receded 1d. Arizona Copper have improved 6d. Keweenaw Tinto have declined 1½s. North Oil lands fallen 5s. 3d. Drillers' shares have receded 5s. Nobel's Explosives have improved 2s. 3d. West Lothian have improved 10s.

EDINBURGH.—Messrs. THOS. MILLER and SONS, stock and share brokers, Princes-street, write, under date April 13:—The Home Railway market has become very weak on the political situation. To-day, however, there has been a better feeling. Caledonian has

Messrs. FAY, JAMES, and Co., in their Metal Circular, dated April 16, 1886, say:—Since our last copper market has been unusually heavy, and Chilian has touched a point 30s. per ton below the then ruling price but in the last few days S. a ton of this has been recovered. All other kinds of copper are lower, excepting manufactured. Iron is steady, and shows again a further slight recovery in Scotch pig. Tin has fluctuated to some extent, and is to-day 10s. 6d. lower for Straits than was a fortnight ago. Spelter is steady, a little more enquired for, and generally 5s. per ton dearer. Spelter is steady. Tin-plates also steady.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
April 11—Van		100	£ 2 4 9	J. F. Kimmel.
14—Standard		30	1 7 0	Dillwyn and Co.

On March 20, dated Rio 30:—Produce 10 days, second division of March, 400L.
On April 13, dated Rio 11:—Produce of month of March, 20,500 oits.

Colonial Mining Notes.

VICTORIA.

The returns of gold for the month of February in Sandhurst will be considerably over that for the previous month.

UNITED Devonshire Mine, Sandhurst, continues to produce marvellous yields, the amalgam for the week being 2317 ozs.

GOLDEN Stream, Avoca.—Work going on satisfactorily. Mine looking well below. Gold for the week, 224 ozs.; tributaries, 26 ozs.

LONG Hand Company, Creswick.—Mine looking well. Yield of gold for the week, 700 ozs. The Ristori Company's yield, 319 ozs. 5 dwts.

MADAME Berry Company, Creswick.—Week's yield of gold, 638 ozs. Bottom level extended 40 ft.; now in from shaft, 1658 ft.

SPECIMEN Hill United, Eaglehawk.—During the fortnight 123 tons of quartz have been crushed for a yield of 432 ozs. 3 dwts. of gold. The backs are still showing fair gold.

YIELD of gold and amalgam for the week, February 28, at Sandhurst was 6756 ozs.; Ballarat district yield of gold was 2461 ozs.; Creswick district yield of gold, 2323 ozs.; Chewton district yield of gold, 318 ozs.; miscellaneous yield from other places, 1287 ozs.

BAND of Hope and Albion Consols, Ballarat (February 28).—Yield for the week from 450 tons, 317 ozs.; 16 tons of pyrites, 21 ozs. 3 dwts. 12 grs.; tributaries, 33 ozs. 8 dwts.; total bar gold, 371 ozs. 12 dwts.

CLUNES.—The New North Clunes Company have for the fortnight crushed 362 tons only, yielding 217 ozs. 10 dwts.; average 12 dwts. per ton. The South Clunes crushing gave 187 ozs. 7 dwts. The stone in the sixth and eighth levels showed improvement.

THE Maldon Mines are making good progress. Mr. Oswald finished a crushing of 200 tons of quartz for a yield of 362 ozs. 12 dwts. of smelted gold from his Parkin's Reef Mine. This first-class mine was offered in London last year, but was not acceptable.

ARARAT Grand Junction Deep Leads.—No. 1 Shaft: Completed rise. Opened out and started driving north and south. Washed machine and a half, which unavoidably contained a good deal of reef, for 4 ozs. 13 dwts. 12 grs.—No. 3 Shaft: Good progress being made with tramway. All drives looking just about the same. Good quantity of washdirt being sent up. Washed three machines, 16 ozs. 2 dwts.; total yield, 20 ozs. 15 dwts. 12 grs.

DIAMOND Creek, Nillimbuk.—Manager reports having struck the reef 400 ft. below water level; it is about 2 ft. thick, showing good gold. This is an important discovery, as it is on the same reef, only at a lower level, from which former companies some years since obtained 70,000l. worth of gold. The reopening of this mine and the discovery of good gold at the deep level will be the means of causing this line of reef to be worked for a long distance.

BARRIER Ranges Silver Mining Association Mines.—Day Dream: Shaft down 147 ft.; lode increasing in thickness. North drive in 61 ft., carrying good ore. Upper level showing great face of ore. During the week sent away 41 tons of ore and 12 tons at grass.—Gipsy Girl: Continue raising good ore.—New Year: There is great improvement in appearance of lode.—Appollyn: Shaft down 204 ft. Cut distinct lode to that in underlie shaft, and proved to contain sulphide of silver.

NEW SOUTH WALES.

CARCOAR.—The monthly district escort took 646 ozs. 16 dwts. gold.

GRENFELL.—The Enterprise claim has just crushed a parcel of 85½ tons of stone yielding 144 ozs. 8 dwts. gold.

PARKES.—Messrs. Quayle and party have finished a crushing of stone, and cleaned up the battery for a total of 3100 ozs. of amalgam, and have a parcel of 80 tons more to crush.

At Costin's Creek, Deakin and party's claim obtained a quantity of specimens a few feet below the surface which assayed 1260 ozs. silver per ton. The gold which the specimen contained besides is said will pay expenses.

The exhibition of 2 tons of refined silver, of the value of 14,000l., the first product from the Sunny Corner Silver Mine, Mitchell's Creek, exhibited in George-street, Sydney, recently attracted great attention. The company have another ton of silver ready for refining.

BINGERA.—The Australian Diamond Mining Company's dam is full, and when some surface works are completed will, in about two weeks (February 28), commence washing diamonds. Part of the mine which has been opened up looks very rich, and excellent results are expected from it.

MITCHELL'S Creek, Sunny Corner.—A rich silver find is reported from Costin's Creek, about 15 miles south of Mitchell. The lode is said to be 9 ft. thick, and the assay gives 1500 ozs. of silver to the ton. The Silver Queen Company, on Sunny Hill Corner, have a very good show. The Sunny Corner Company are about sending another large consignment of silver to Sydney.

MOUNT HOPE.—Payable gold has been discovered 18 miles north of Mount Hope. Great dissatisfaction is felt at the leasing of the land; miles have been taken up, and there is little or no chance for the poor man. The company's shaft looks like a jeweller's shop, gold all round. The Minister of Mines should prevent the wholesale leasing of land, as it is believed the place will rival old Bendigo.

QUEENSLAND.

GYMPIE.—No. 1 North Phoenix had three weeks' ordinary washing up, which again resulted in a very satisfactory return—800 tons of quartz gave an average of 1 oz. 10 dwts. 6 grs. per ton, and from proceeds a dividend of 2s. 6d. per share, equal 2500l.

CHARTERS TOWERS.—Day Dawn has had another crushing—770 tons of stone yielding 1742 ozs. 11 dwts. of gold. A dividend (the 80th) of 4s. per 25,000th share paid.

WESTERN AUSTRALIA.

The preliminary report of the Government Geologist on the Kimberley country, Western Australia, has been published. It states that he has discovered a large area of territory, which he believes will prove auriferous to a payable degree in the country on the Margaret, Mary, Panton, Ellora, and Ord rivers, comprising 10,000 square miles. He also found encouraging indications of alluvial gold in the rivers, valleys, and flats, and he recommended that the Government or private enterprise should thoroughly test the country.

WATSON BROTHERS MINING CIRCULAR.

WATSON BROTHERS,
MINEOWNERS, STOCK AND SHARE DEALERS, &c.,
1, ST MICHAEL'S ALLEY, CORNHILL, LONDON.

A FEW CORNISH NOTES.

(FOR GENERAL CIRCULATION.)

In some cases the market price of a mine and its intrinsic value are two very different things. The one is determined too often by "bulling" and "bearing" of shares, mostly by the latter, and this consists of selling what a person has not got, and then by damaging statements knocking down the price, so as to buy in and make a profit. In this way many companies have been ruined. All kinds of adverse reports and insinuations, in fact, are set afloat on the market, and then circulated abroad by the "bears," who may be sometimes right, but more frequently wrong.

On the other hand, the real value of a mine, whether as a speculation or investment, is arrived at, and its prospects of success fairly estimated by certain points in progress, based upon well established facts, and having from analogy or otherwise fair chances of resulting profitably.

These particular points of interest we shall endeavour to keep in view, and more particularly refer to in any remarks we may make on the mines we have lately visited, we not only give our own views upon them from personal observation, but base them also upon the opinions of sound practical agents whom we have consulted.

THE PRINCE OF WALES.—When this was started as a copper mine some years ago, and had machinery erected to prove a very promising and well known lode, it was no favourite on the market, and shares were forced down to a mere nominal price, just as they have now been depressed on approaching tin. The writer of this, who frequently at its early working visited the mine, and kept certain points in view, bought largely of shares at a few shillings each, and when copper was reached they rose to 3l. 10s., paid good dividends, and sold upwards of 40,000l. worth of copper—the ore being of a very rich quality, and having in it about 6 ozs. of silver to the ton. For the last few years the mine has been poor, and in a transition state from copper to tin. This opinion has been entertained not alone by the resident agent, but by many others who have inspected it, and have given the opinion that a valuable tin mine may be soon opened up in depth, and, holding this opinion, more than one inspecting agent of late has been buying shares largely, which shows their high opinion of it.

At the last meeting of shareholders the committee was requested to stop all operations that did not pay, and to sink the shaft for tin.

We found on our visit that the shaft since then has been sunk 11 fms., and will be sunk 4 fms. deeper (to the 117 fm. level) before driving to cut the lode. The sinking of this 4 fms. will occupy nearly a month; the driving to cut the lode from two to three months.

At the 90 fm. level there was a little tin mixed with copper; from the 90 to the 102 the lode improved in value for tin more than 50 per cent. In fact, there is a course of tin in the 102 richest in the bottom for nearly 30 fms. long, worth 10l., and in one place 40l. per fathom. It is this lode we may cut 15 fathoms deeper in three or four months. Of the result we have no fear, and it may open out a large extent of ore ground. One agent, who within the last few days has thoroughly inspected the mine, and taken samples and assayed them for tin from every available point, assures us that he has no doubt whatever in his own mind that we shall soon have a valuable tin mine. He told us, moreover, that being a shareholder at a high price, the fall in shares astonished him so that he made the inspection referred to, and has since bought a large number of shares at the depreciated price. Another agent whom he took with him has also purchased. To us, who are about the largest shareholders in the mine, and have stuck to it through evil report and good report, this was great comfort, and worth coming into Cornwall to learn. And we mention it in the hope that it may prevent any others from sacrificing their interest.

And now let us look at the financial position of the company. At the last meeting the assets over liabilities, without estimating the plant, were 1131l. 8s. 11d., against which a call of 1s. 6d. per share—900l.—was made. A large amount of the old liabilities have been paid off, and at our next meeting in May the balance against us will be about 1000l., including every liability, and about equal to 2s. per share.

Some time ago Capt. Bennetts, an old experienced tin miner, inspected the mine for the company, and advised sinking the shaft, as he fully expected to find a good tin mine in depth. Since writing the above remarks we have seen him, and he reminds us that the lode to the 90 underlies south. At the 90 it became almost perpendicular, and at the 102 changed its underlie north towards the granite, which he considered most important. He reminds us also that the Good Luck tin lode is underlying 3 to 4 ft. a fathom towards the shaft, and a cross-cut now might also make a good discovery. He tells us that he has no doubt the mine will be a rich tin mine, and that when he went there he was surprised to see such prospects for tin.

We should not enter so much into these details but for the fact that the shares, upon which over 1l. each has been paid, have literally been knocked down to 1s., and in consequence of the number of letters we received from shareholders, asking what was the cause of it, and expressing their alarm as well as surprise, we determined to visit it, and find out everything, *pro* and *con*, for ourselves. And we have come to the conclusion that in Prince of Wales we have one of the best little speculations in Cornwall, no matter what the market price may be.

On our return to London we learn from the agent's report that what appears to be a new lode altogether has come into the shaft, and, if so, it adds greatly to the value of the mine, and is very important. This discovery has been made since we were at the mine. The agent, it will be seen, is prudently cautious at present. He says he is pleased to be able to report a discovery of some splendid rocks of tin, having the nature and character of a large and promising tin lode dipping into the shaft from the north. "I am of opinion," he adds, "it is No. 1 north lode, which was intersected in the cross-cut from the engine-shaft at the 55 fathom level. Should it be so, it will be a new and very important feature in the mine." In a private letter he adds, "I should like you to see the stuff from it; we can break stones ½ cwt. and half tin, and quite a different class of tin from any seen in the mine before; but I wish it to be understood that we are not sure yet that it is a new lode, but it looks like it in every way. A fathom's sinking more will prove it; if it is a lode it is in whole ground through the mine to surface."

Let us assure the Editor of the *West Briton*, in reply to his remarks on a war duty, that there are, in regard to mining, many things that "we should like to see," but which we know are impossible.

WHEAL CREBOR is looking better now, the agent's assure us, than it did two years ago, but the shares represent 15s. to 1l., as against 2l. to 3l. at that time. There will be a sale of good ore on Thursday, the next sampling will be 500 tons, and a profit will be made on the four months' working sufficient to pay a divi-

dend of 1s. per share, which is a great thing for a copper mine to do now-a-days. Crebor is worked by water power, is remarkably well laid out, and at the old price of copper, its present returns would yield a very large profit. In the 144 west there has been a very rich course of ore, 40 fms. long and dipping west. Some distance beyond this was Goldworthy's bunch, which was a rich course of ore. Below the 144 a winze has been sunk as deep as the water would allow (5 fms.), and in the bottom there is a lode still under water worth 6 tons of ore per fathom. Now the great points here are to get under the great course of ore at the 144, and also to reach Goldworthy's. The ore is evidently dipping west, the 156 end has a lode 3 ft. wide, but not yet up to the ore ground of the 144. There is also a rise from the 72 to 48 to open out ore ground, and the 108 west is a point of interest to discover the south part of the lode. We may add that Goldworthy's bunch is 22 fms. west of western end at 144, and that the rich course of ore called Andrews, which gave the mine the great start from 2s. to 10l., and which dipped east, will be reached by the 144 east, which is another important point, though not so immediate as the western ground. There is on the mine a large quantity of mundic, estimated at 1000l., for sale, April 14th.

In our next we hope to give, also written on the spot, our impressions of, among others, West Frances, Blue Hills, Cook's Kitchen, Metal and Flow, East Blue Hills, New Langford, &c.

For a number of years Nevada has levied a tax on the gross bullion yield of the mines, without taking into consideration the cost of producing the bullion. The tax has been an onerous one, especially of late, when the product of many of the mines has been small, and there has been little profit. A new law was recently passed by the Legislature, which provides that all ores, tailings, and mineral-bearing material of whatever character, shall be assessed for State and county taxation; but it provides a better method than formerly, by taxing net proceeds as follows:—From the gross yield, return, or value of all ores, tailings, or mineral-bearing material, of whatever character, there shall be deducted the actual cost of extracting said ores or minerals from the mine, the actual cost of saving said tailings, the actual cost of transportation of said ores, mineral or tailings, to the place of reduction or sale, and the actual cost of such reduction or sale; and the remainder shall be deemed the net proceeds, and shall be assessed and taxed as provided for in this Act.—*San Francisco Morning Post*.

THE INSTITUTION OF CIVIL ENGINEERS.—At the meeting on Tuesday, Sir Frederick Bramwell, F.R.S. (President), in the chair, it was announced that the Council had recently transferred George Buchanan, William Rhodes, and George Hennet Ross to the class of Members; and had admitted James Adam, Albert Ernest Austin, James Picton Baillie, Alan Neville Banister, Herbert Alfred Lucas Barry, John Watkins Brough, Arthur Richard Brown, Alexander Edward Chapman, Francis James Cochrane, John Davis Cotesworth, Sidney A. Court, Thomas Travers Dixon, Claude Francis Egerton, George Erant, jun., Douglas John Gillon, John Goodman, Francis William Hardwick, B.A.; Harry Kellett, Charles Philip King, William Lynch, Henry Allan Moss, Godfrey Bowen Partridge, Thomas Pope, Henry Simmonds, Arthur Drew Thomas, and Charles Campbell Wardrop, as Students of the Institution. The monthly ballot resulted in the selection of Walter Bulkeley Coventry, Rio Tinto; John Hopkinson, Manchester; Archibald Henry Irvine, Mersey Railway; Charles Le Lievre, Ealing; James Walker, Harbour Engineer, Isle of Man; and John Arthur Wright, Rouen, as Members; Harold, William Abernethy, Hull; Justin Victor Wilfrid Amor, Mexico; Joseph Devonport Finney Andrews, Glasgow; Andrew George Ashcroft, Stud. Inst. C.E., University College, London; Robert Aytoun, Aberdeen; William Christopher Barley, Ramsgate; William Bean, Welling, Kent; Harry John Toler Bennett, Parsonstown; Charles Henry Blackburn, Stud. Inst. C.E., P.W.D., India; Frank Brewer, Stud. Inst. C.E., Ohio Valley Railways; the Hon. Reginald Thomas Dudley Brougham, Westminster; Matthew Joseph Butler Napanee, Canada; William Butterton, jun., Natal Government Railways; James Cameron, Belfast; Albert Johnstone Campbell, Mexico City; Edward Glover, M.A., B.E., County Surveyor, South Mayo; Hugh Erat Harrison, B.Sc., Red Lion-square; Christopher Little, Stud. Inst. C.E., Government Railways, New South Wales; George Vincent Maxted, Stud. Inst. C.E., Rochester; Michael Nethersole, Stud. Inst. C.E., P.W.D., India; William Baker Ollis, Waterworks, Great Yarmouth; Henry Ough, Austin Friars; Ernest Samuel Prentice, Stud. Inst. C.E., Westminster; Ernest Van Putten, Stud. Inst. C.E., Lewisham; Thomas Noble Ritson, Jersey; John Pemberton L. and S.W. Railway; Archibald Alexander Swan, Glasgow; Percy Tarbutt, Lombard-street; Sam Tomlinson, Stud. Inst. C.E., Bradford; and George Watkeys, Llanelli, as Associate Members; and Henry Spencer Palmer, Lieut.-Colonel R.E., Yokohama Waterworks; Nowrojee Pestonjee, Ahmedabad, India; and Theophilus George Wight, Crown Surveyor, British Guiana, as Associates.

THE directors of the Australian Mortgage Land and Finance Company (Limited) have issued their twenty-first annual report. The net profit for the year, after providing for the cost of creating additional 197,890l. Four per Cent. Debenture stock, was 103,281l. 15s. 4d., including 1500l. 0s. 11d. brought forward. Out of this amount the directors paid in November 40,000l., being a dividend of 10 per cent. for the half-year, and they recommend that the balance—63,281l. 15s. 4d.—should be appropriated as follows:—46,000l., in payment of a half-yearly dividend of 10 per cent. on 80,000 shares (5l. paid), and 20,000 shares (3l. paid), and 17,281l. 15s. 4d. carried forward, 60,000l. The premium on issue of 20,000 new shares has been added to reserve fund, which now stands at 460,000l.

The managing director of the Russell Gold Mining Company (Limited) says in a letter dated March 27th, 1885, that we are commencing to open up Riggon Hill, and we have had splendid prospects from it. The Barber cross-cut is in 52 feet, and the level running above it on the west side or hanging-wall side, is about 40 feet, and we hope in a few days to sink and make a conjunction with Barber's cross-cut and then shoot from above into the trucks below. We shall start running levels in the cross-cut north and south on 20 feet of ore that goes from \$20 to \$25 per ton. This will give you some idea of the quantity of stuff we have in sight, and when we get, say, 60 to 100 stamps running we shall mill everything, and the returns must naturally be very large.

GOLD AND SILVER.—Messrs. FIKLEY and ABELL write under date April 16:—Gold: The Bank has received since our last a total of 194,000l. The remainder of the arrivals have been taken both for the Continent and for India. The Tagus brought 47,000l. from Brazil; the Rome brought 38,000l. from Australia; the Trojan brought 29,000l. from the Cape. The P. and O. steamer takes 54,000l. to India.—Silver: The silver, ex Hobein, was sold on Monday at 49½d., or an advance of ¼d., owing to the much higher rates received from India. Today, with small supplies, we quote 49½d. buyers. The amount by the Hobein was 22,000l. The Ancona takes 125,000l. to Bombay. Mexican dollars have improved since our last quotation to 48½d., at which price the arrival by the French steamer (30,000l.) has been placed.—Exchange: Although a reduction of 15 lakhs has been made in the amount to be tendered for yesterday, the India Council only effected the following sales:—Bills on Calcutta, Rs. 2,25,000, rate, 1s. 6-9375; Bombay, Rs. 4,60,000, 1s. 6-96; Madras, Rs. 3,00,000, 1s. 6-9375. Tenders at 1s. 6½d. receive 50 per cent. above, in full. Special Rs. 2,50,000 in transfers on Bombay at 1s. 7½d. Special allotments created considerable excitement on Saturday last—Rs. 5,00,000 in bills on Calcutta at 1s. 6½d.; Rs. 5,00,000 on Bombay, in transfers, 1s. 7-5-32, and Rs. 3,00,000 at 1s. 7-9-32. The amount for next week is further reduced to Rs. 20,00,000. The rates from the East are—Bombay and Calcutta, 1s. 7d.; Hong Kong, 3s. 6½d.; Shanghai, 4s. 10½d. The quotations for bullion are—Bar gold fine, 77s. 9d. per oz. standard; bar gold, containing 20 dwts. of silver, 77s. 10½d. per oz. standard; bar silver, fine, 49½d. per oz. standard; bar silver, containing 5 grs. gold, 49½d. per oz. standard; or silver 53½d. per oz.; Mexican Dollars, 48½d. per oz. last price; quicksilver, 5l. 15s. to 5l. 17s. 6d. discount, 3 per cent.

Law Intelligence.

A CARNARVON QUARRY MANAGER CHARGED WITH EMBEZZLEMENT.

The case of Gartside v. Ellis Roberts, manager of the quarry of the Nantlle Vale Company, which had been several times adjourned, again came on for hearing before Captain Wynn Griffith and Mr. J. Menzies, at the county magistrates' court, Carnarvon, last week. The prosecutor was Mr. J. H. Gartside, Manchester, a partner in the company, and the charges that the sums of 30*l.*, the rent of Ty Mawr Farm, on the property of the company at Nantlle, 24*l.* 9*s.* 5*d.*, 9*l.* 10*s.* 3*d.* 12*s.* and 13*l.* had been received by the accused, and not transmitted to the company.—Mr. F. A. Evans (Messrs. Turner, Allanson, and Evans) was for the prosecution, and Mr. C. A. Jones defended.

MR. GARTSIDE (in cross-examination) said that Ellis Roberts was engaged at 12*l.* 10*s.* per month; this agreement was not varied at any time, and he was not aware that Ellis Roberts, in any subsequent agreement, agreed to devote the whole of his time to the quarry, conditionally upon his having the house and farm (Ty Mawr) rent free. The Nantlle Vale Company did offer the house rent free to him, to live in. The company had received since Ellis Roberts left their employ a bill of an account for 10*l.* for furniture supplied to this house. Of course, the bill was never paid—it was repudiated. He was not aware that Mr. Hugh Roberts, solicitor, Carnarvon, recovered that 10*l.* from the company. On the 22nd of November, he saw Ellis Roberts at Nantlle, and he then discharged him. He did not know that Ellis Roberts had discretion to buy or sell slate on behalf of the company. There had occurred so many irregularities that the quarry had to be stopped while the whole matter was thoroughly sifted. These proceedings were commenced after the accounts were gone into. He was not aware that the Nantlle Vale Company owed the Victoria Slate Company any money, neither was he aware that the Nantlle Vale Company, on the 2nd of January, received a letter from Ellis Roberts asking for the last time for a statement of accounts, and threatening legal proceedings. He would not swear one way or the other. The letter might have been received. Ellis Roberts never furnished the company with a statement of accounts.

By the Bench: Ellis Roberts told him that he could rent the farm for 50*l.*, and subsequently Roberts did let it for 30*l.* The company never received a penny of the rent.

MR. MYDDLETON was next cross-examined. He said that he was instructed in July, 1884, to audit the books of the Nantlle Vale Company. He received three books from Ellis Roberts directly upon applying for them, and a diary also came into his possession about the end of last September. There was an entry in it of the receipt of 10*l.* rent of the farm. He would swear that Ellis Roberts never told him that he was entitled to the rent. Witness asked him whether he did not remit the account to Manchester, and his explanation was that he put the 10*l.* down as against the petty cash transactions. The books of the Victoria Slate Company showed that a sum of 5*l.* 7*s.* 8*d.* were owing to them from the Nantlle Vale Company for slates sold. Replying to the Bench, witness said that in the Nantlle Vale Company's books there was no record of any cash transaction with the Victoria Slate Company. Witness admitted having sent to the customers all through the country to endeavour to get evidence. He had been instructed by Mr. Gartside, and not by Mr. Leigh. Out of the whole 74*l.*, which the accused was charged with embezzling only one item of 16*l.* 16*s.* 10*d.* was found in the books of the company, except in the memorandum book, of the slate sellers. He had found that various consignments had been made by the company, but no particulars of them were found in the company's books, and he had considerable difficulty in finding out what became of them.

MR. LEIGH, a member of the company, cross-examined, said that Ellis Roberts was engaged by Mr. Gartside, on the recommendation of Mr. Charles A. Jones. The present proceedings were not taken with his sanction.

MR. C. A. JONES: I ask you, as a man of the world and a lawyer, whether you think Mr. Roberts has embezzled this money?

WITNESS: I cannot answer that question, but I am amazed at these charges. I was very much pleased with Mr. Roberts for some time, for I thought he was a very hard-worked man. Continuing, witness said that he thought that the company would find when the accounts were properly balanced, that they had lost considerably in the quarry. He had received a letter from Ellis Roberts asking for a statement of accounts, and he was rather astonished at such a request, as he thought that Roberts himself ought to supply the company with a statement of accounts. Ellis Roberts was to have the house (Ty Mawr) rent free, but not the land. One member of the company insisted on Ellis Roberts dismissal, and witness told him to do as he liked. He never received any rent at all from the farm, and never knew until a few days ago that it had been let.

MR. C. A. JONES said that his contention was that the land and the house and proceeds therefrom belonged to Ellis Roberts, in consideration of his devoting the whole of his time to his duties as quarry manager of the Nantlle Vale Company.

RICHARD ROBERTS, Ty Mawr, Nantlle, was the last witness called. He said that he paid Ellis Roberts the 30*l.* rent in three instalments of 10*l.*, 5*l.*, and 15*l.* He had taken the place in March, and Ellis Roberts came to him for rent in about two months afterwards. He paid the last instalment by cheque, Ellis Roberts wanting him to settle because he, Ellis Roberts, wanted to go to Manchester to see the company.

MR. C. A. JONES at this juncture read a letter from a Mr. McPherson, one of the company, to Ellis Roberts, in which the former said, "Mr. Marriott takes my place, and he will pay the men. You can give Mr. Marriott the 30*l.* you said you had in your possession."—MR. C. A. JONES: Your worship has heard what this letter says, I ask where the embezzlement is?

The magistrates retired to consider whether there was a case on which to hear Mr. Jones for the defence. On returning Captain WYNN GRIFFITH said: The Bench considers that there is not sufficient evidence on which to send Ellis Roberts for trial before a jury.

IMPORTANT PROSECUTION OF A COLLIERY MANAGER AND OWNER.

At the Barnsley Police Court on Wednesday, Henry Lodge, owner of the Ryhill Main Colliery, and John C. Sutcliffe, certificated manager, were summoned, at the instance of the Home Secretary, for neglecting to fulfil the provisions of the Mines Regulation Act by not providing sufficient manholes, or refuge holes, in the engine-plane, along which the men had to travel.

MR. GILL, Wakefield, prosecuted, and Mr. Clegg, Barnsley, defended Lodge, Sutcliffe pleading guilty.

MR. GILL said that Sutcliffe was the manager of the Ryhill Main Colliery, at which 100 men were employed, and which was, he was sorry to say, one of the worst conducted, worst managed, and most deplorable collieries in Yorkshire. On January 28 an accident occurred in the pit engine-plane, two drivers being almost killed. A number of tubs ran down the plane, and by some miracle the men escaped death, although, had the law been obeyed, there would have been no danger, because there would have been manholes in which they might escape from the tubs at a distance of every 20 yards. In the plane in question the manholes were no less than 55 yards apart, although there had been other manholes, which were choked up with dirt and rubbish. In this pit all men had to go along this plane, so that the constant danger to them was exceedingly great. Mr. Lodge was really the manager of the pit, Sutcliffe being there merely as a buffer, receiving 30*s.* a week, and against him the charge was not pressed.

MR. GERARD, Government Inspector of Mines, and others having proved the case, it being submitted in defence that Mr. Lodge knew nothing of the management of the pit, the Bench fined him (the owner) 5*l.*, and costs, and the manager 2*l.* and costs.

Labour Notes.

THE STRIKE AT DENABY.

The week's respite from ejectment has had no other effect upon the miners at Denaby than to strengthen their desire to push the struggle to its last conclusion. The interim has been spent in preparation, and in mutual encouragement to face the worst consequences of the dispute. Meetings have been held, but negotiations between masters and men have not been resumed, and the condition of affairs remains unaltered. The evident firmness of the men to abide by the decision taken at the beginning of the year has again driven the company to a course which cannot be anything but painful to them. The police have once more taken possession of the village, and have cleared it of 500 of its inhabitants. The date of this second eviction was wisely kept secret, lest the presence of miners on strike in the neighbouring district should incite to opposition men who have hitherto conducted their difference with the masters peaceably and even good-humouredly. But expectation has been on tiptoe all the week, and the news of the arrival of a force of 200 constables early Tuesday morning spread quickly. Hundreds of people at once took the road from Mexborough, Swinton, and Conisborough—many out of idle curiosity, some out of sympathy, and others with offers of practical aid. The village again threw off its desolate aspect. The long, uninteresting street, which starts from the railway crossing, and winds monotonously along in the direction of Conisborough, was soon bustling with the crowd. The dull, dark-red fronts of the houses, which for the last few days have had such a woe-begone appearance, brightened under this renewed activity. Only the Conisborough end of the village, where the previous ejectments took place, had no share in the awakening. Both interest and incident were transferred to the Mexborough end, and to that which lies on the right of the main road. It was here that Tuesday's evictions were made. Armed with 100 warrants, Chief Constable Russell and Superintendent Hammond and their men set to work to turn into the streets, bag and baggage, 100 families. As on the first occasion, no hand was raised either to resist or to assist. Half an hour's grace was allowed to make ready for removal. Then the real work began. The police, whose attitude towards the people cannot be too highly praised, entered the houses, and little heaps of furniture soon began to collect in the streets, and to give a new feature to the scene. As house after house was visited and emptied of its contents, the heaps became more numerous and more bulky. Chairs, tables, beds, clothing, chests of drawers, pictures, and sewing machines were piled together with every care and precaution against injury. Meanwhile the people divided themselves, and, collected in groups round the different houses, looked on in silence. Never were crowds more orderly. There was no incident, no sign of excitement, no hint of displeasure, no expression even except that of determined indifference, which occasionally broadened into a grin when some jocose constable varied the monotony of handing mattresses from a bedroom window by dropping a bolster on the head of a brother constable in a brown study below. Happily, the rain kept off, or the damage might have been serious, not only to property, but to health. As it was, the east wind was a keen enough discomfort. What to do with the 500 men, women, and children now that the doors were locked, and the windows nailed against them, was a serious question. Until it could be answered for those who had not been able to make previous arrangements—and they were the majority—the streets presented a strange and a painful series of pictures. Many whose houses stood away from the road, on the far side of some waste ground, camped in gipsy fashion. Collecting their household goods around them, they lighted fires upon the bare earth. Women and children crouched near these primitive fireplaces, some of them making their day's meal off a crust of bread. Others sheltered from the wind behind walls, wrapping themselves in coats and shawls until they became almost unrecognisable. In the main street, however, there were neither sequestered nooks nor fires. Shelter for the children was made among the furniture. One little fellow looked quite happy, stowed away from the cold east wind and the threatening rain between a couple of mattresses and a chest of drawers. But the more active kept themselves warm by running to and fro to watch the constables as they dragged wringing machines into the road, passed beds and mattresses through upstairs windows, or exercised their ingenuity and their patience in practical solution of problems as to how such large chests of drawers ever got through such small doors. While the work of ejectment went on quietly and quickly, the work of removal was begun and continued with equal order and energy. Wagons and carts were loaded by the men, and carried off to Mexborough. Horses there were few, but men there were plenty. Within traces of rope scores of miners were to be seen dragging behind them with shouts and laughter decrepit farmers' wains and crazy wherries—those returning empty cheering those who pressed on towards Mexborough with great loads of furniture. But it was long, with such means as were at their command, before the miners could make any perceptible reduction in the number and size of the domestic heaps which littered the roads. The idly curious now began to return to their homes, and to leave the field clear for those who had the means to give assistance either in the work or removal or in offers of temporary shelter. Loaves of bread and cheese were distributed where the need was greatest, and even the police shared their lunch with some of the hungry youngsters. It was a sight that reminded one of some old monastic picture, to see the crowd of neglected boys and girls pressing eagerly round the wicket of the great colliery gate, and then to see a big, burly officer, with a pile of bread on his arm, distribute the slices among the grateful hungry. But on the other side of the gate was a scene of another description altogether. Scores of policemen stood in the great black yard overlooked by the broken window of a deserted office devouring their lunch of sandwiches with the air of men who had got well through a not very agreeable duty.

At Mexborough, whither the migration had set as on the previous occasion, there was nothing unusual. Since there are no houses to let either here or at Swinton, many sympathisers have lodged the evicted. But even Mexborough is not equal to the strain put upon its ordinary accommodation, by the accession in one week of nearly 500 people. Barns, assembly-rooms, Salvation Army barracks, and even chapels, have been turned into lodging-houses. Some of the people seem to have become already accustomed to this communistic life in large public rooms.

The funds of the Association have long since been exhausted, and the people have lived on the charity of others. Ministers of many denominations have come forward with offers of relief. The Rev. T. J. Leale, Congregational minister, of Mexborough, had crowds of destitute miners' wives from Denaby at his residence on Tuesday. He handed out a large number of 4 lb. loaves, buns, pork pies, and some roast beef. A large hamper, containing pies and buns, was taken to his house by a railway porter, the parcel having arrived via Doncaster, but the donor was unknown. The rev. gentleman also received 2*l.* during the day from Captain Russell, Chief Constable of the West Riding, for food for the people, and various amounts from sympathisers in Sheffield. Before repeating the work of distribution, the rev. gentleman addressed the crowd around him. He said he had just come from Denaby. The scenes he had that day witnessed had been exceedingly painful, and he hoped he should never witness the like again. (Hear, hear, and a Woman: "It's to be hoped not.") He felt certain that the Denaby people had the sympathy of all right-minded Christian men and women. (Hear, hear.) He had no doubt when the sufferings of the families became well known the public would do their best to alleviate the distress. (Hear, hear.) When the strike was over, he hoped it would be the last, and that in future disputes would be settled by the masters and men by arbitration. (Hear, hear, and a Voice: "Let's hope so.") He had been astonished at reading the letter which had been sent by the manager of the colliery to the papers, and which said that the men could earn 8*s.* a day for eight hours per day. (A Voice: "Don't believe it.") After what the women,

as well as the men, had said to him, he (the speaker) could not help but think that the statement was not correct, but he should like to hear what those round him had to say about it. Several persons spontaneously replied. One said he had not earned more than 3*s.* a day for six days in the week, and another that he had only handled 16*s.* at the week end; the latter was described as "a filler." The rev. gentlemen, continuing, said he hoped the letter from the manager would not stop up any fountain of sympathy and charity, but that the true nature of the distress would be realised. (Hear, hear.) He knew nothing of Mr. Buckingham Pope (the Chairman of the board of directors), but considered that the wishes of the men to have the matter settled by arbitration should have been acted upon. The speaker condemned the action of the colliery company in compelling the miners to live in the houses and then unceremoniously turning them into the streets. In conclusion, he read a letter from a Sheffield Nonconformist minister relating to the evictions. The distribution of relief was then proceeded with.

Denaby Main Colliery is one of the largest and most important concerns in South Yorkshire. The area of the coal field when the seam was reached in 1863 was between 2000 and 3000 acres in extent, and was leased from Messrs. A. Montague, A. Fullerton, &c. The seam, which in some places is the thickest worked in the district, is 10 ft. 2 in. in thickness. This is won at a depth of 450 yards, and previous to the opening out of the South Kirby Colliery, where the coal underlies the surface at a depth of 639 yards, Denaby was the deepest in the district. The colliery has a special claim to notice, as it is the nearest to that important formation, the magnesian limestone. In noticing this formation, the late Mr. Woodhouse, of Derby, said—"It must be for the enterprise of 100 years to come to test the extent of the vast field of wealth now reposing under that mighty formation."

The Cardiff and Swansea Steam Coal Company's deep pit has reached its intended depth, and under the energetic management of Mr. J. T. Salathiel arrangements are being actively pushed forward for starting to sink the other pit. The Lower Resolven collieries at Melincourt and Glynwilym, under the management of Mr. T. Stroud, have been kept going very fairly; but as so many hands have been taken in from other places, the clearance is not sufficient to give full work. The clearing of water from different parts of the workings also greatly harasses the managers, and proves expensive to the proprietors; but to meet the difficulty preparations are being made, at considerable cost, to fix a powerful "air compressor" on the bank to work the various pump-engines below, and so dispense with the steam that heats the works. A dispute has arisen lately in reference to a request made by the officials to the men as to cleaning their coal. The men have been accustomed to filling their coal into the trams just as they get it from the seam, without cleaning the shales and stones, but owing to the present depression in the trade this mode of procedure affected the sale of coal in the market, and consequently the officials requested the men to perfectly clean the coal. The men demanded an equivalent in the cutting price equal to the extra labour, hence the dispute. It has, however, been agreed that the men should go on working on the new system to the end of April, and that they should have 3*d.* per ton as an equivalent for the extra labour, to the coal cutters; also that the deductions for improper filling of the coal should be left to the chief weighman and the coal inspector of the colliery. Further arrangements in the matter were left in the hands of Mr. William Thomas, Bryn Awel, Aberdare, and Mr. D. Morgan, the miners' agent, and work was resumed on Thursday.

The monthly meeting of the Caerphilly district of miners was held at the Goodrich Arms, Caerphilly, on Saturday, Mr. Zethanah Miles, Bedwas, in the chair. The meeting approved of the miners in general throughout the district supporting Mr. Alfred Thomas as a Liberal candidate for the Caerphilly division at the next election. The proposal of the railway companies to advance the rates was unanimously condemned by the meeting.

On Monday evening Mr. David Morgan, miners' agent, addressed a largely attended meeting of the men engaged in the Merthyr Vale Collieries, which was held at the Abervan Hotel, Merthyr, and at the close of his speech it was decided unanimously to join the Aberdare and Merthyr District Miners' Association, a committee being appointed to make the necessary arrangements for affiliation.

A mass meeting of miners employed at all the leading collieries in the Wombwell, Wath, Hoyland, and Mexborough districts was held at Brampton, on Wednesday afternoon, to express sympathy with the evicted miners and their families at Denaby, and to urge the non-Union men to remain firm. Large processions were formed, and the Denaby men were loudly cheered on arrival. Resolutions condemning the "heartless conduct" of the Denaby owners, and promising support, together with another declaring the demand for a reduction of wages unwarranted, were passed. The speakers were very firm in recommending the men to resist the reduction by all legal means.

On Thursday, at a meeting of the men employed at the Norfolk and Drift Pits, belonging to Messrs. Newton, Chambers, and Co., and belonging to the North Derbyshire and South Yorkshire Miners' Association, it was resolved to resume work on the masters' terms. The men say they came to this decision themselves, and without any consultation with Mr. Chappell. The men belonging to the Yorkshire Miners' Association, and working for the same firm at the Rockingham and Tankersley Collieries, condemn the action taken by the men at the other two pits.

At a meeting of the Morley Main miners, held in the Market Hall, Morley, on Tuesday morning, it was unanimously resolved to abide by the resolutions of the Rotherham and Barnsley conferences. There were about 500 men and boys above 16 years of age present, every hand being held up in favour of continuing the strike.

At a meeting of West Yorkshire coalowners held in Leeds on Tuesday, (at which representatives from all the collieries where the men are on strike were present, and also a deputation of South Yorkshire coalowners), the original resolution not to reopen the pits except at a reduction in wages of 10 per cent. was unanimously confirmed.

THE COLLIERY EXPLOSION AT GREAT FENTON.—John Bithell, of Hanford, the fireman who was injured by the explosion at the Great Fenton Colliery on the 8th inst., and has since been lying at the North Staffordshire Infirmary, succumbed to his injuries on Wednesday evening. This makes the seventh death in connection with the explosion. The deceased leaves a widow and six children.

SCOTCH PIG-IRON WARRANT MARKET.

MR. W. WILSON (Glasgow, April 16) writes:—The warrant market has continued firm in the face of war rumours. The price is so low and the stock so well held that panic is impossible. There is a meeting called for 20th April by requisition of shareholders of the Monkland Iron Company to confer regarding that company's present position and prospects. Opposing views among the shareholders may, however, delay any action being taken. It was expected that the furnaces would be blown out. Shipments for the week do not compare favourably. One furnace has been lighted at Glengarnock Works, making the number blowing 90. 1494 tons were put into store here last week, while at Middlesbrough no change was made. Business was done during the past week at the following prompt cash prices:—

Thursday, April 9.	Friday, April 10.	Monday, April 13.
No market.	41/0, 41/11	42/1, 42/2 1/2
Tuesday, April 14.	Wednesday, April 15.	Thursday, April 16.
42/3, 41/10	41/10 1/2, 41/11, 41/10 3/4	41/10, 41/8, 41/10
	1885.	1882.
Price of Scotch Warrants, April 13.....	42/	42/3 1/4
Furnaces in blast in Scotland do.	90	92
Iron in store at this date.....	593,549	593,594
Shipments of Scotch pig-iron for 4 weeks ending April 11.....	9,870	12,991
Do, since beginning of year.....	122,203	152,749
Price of Middlesbrough, No. 3, April 13 ..	34/	37/
Furnaces in blast Middlesbrough dist.	97	102
Middlesbrough iron imported at Grange-1 month, week ending April 11.....	4,825	3,000
Do, do, since beginning of year.....	112,907	78,525

EXTENSION OF THE SANDHURST GOLD FIELD.

Since the palmy days of the old Bendigo alluvial gold fields, which included a large area of rich shallow workings, in the centre of which has arisen the thriving city of Sandhurst, now the premier quartz reefing gold field in Victoria, and probably in the world. There has been since the exhaustion of the shallow alluvial deposits a great impetus given to the development of quartz mining, and which has been attended with marked success. Hitherto the operations have been chiefly confined to the main line of reefs, within or near the city boundaries of Sandhurst, and the neighbouring borough of Eaglehawk, the principal being those of the Hustlers, Garden Gully, and New Chum line of reefs. A large tract of country lying northward of Eaglehawk and Sandhurst, known as the Whipstick scrub or bush, was in the early days penetrated by many prospecting miners, and most of the small rich alluvial gullies were worked; but little attention was then, or even since, been given to the development of the continuation of the lines of the rich quartz lodes which run through Sandhurst and Eaglehawk, away northward into this dense Whipstick country. The Mining Department having authorised a survey of the district, Mr. Reginald G. Murray, Geological Surveyor, was entrusted with the work, and his report to the Secretary of Mines shows the importance of the work, and the probabilities of its yet opening up another quartz gold field rivaling in prosperity the older and neighbouring fields of Sandhurst and Eaglehawk. Mr. Murray has prepared a plan showing the topographical features, the alluvial gold workings, the surface outcrops of quartz reefs, and the most remarkable or persistent rock-bands within a tract of country $1\frac{1}{2}$ mile wide, extending 3 miles northerly from the northern boundary of the borough of Eaglehawk. Through this area run the prolongations of two of the principal lines of reefs in the Sandhurst district—namely, the Lightning Hill reef, supposed to be a continuation of the Hustlers line, and the Moon reef, evidently an extension of the Garden Gully and Specimen Hill line. The mode in which the survey was effected was as follows:—A main line having a magnetic bearing of north 20° west, approximating to the general direction of the strike of quartz reefs and rock bands was cleared for a distance of 3 miles from the trigonometrical survey station on Lightning (White Horse) Hill. Lines were then cleared at every $\frac{1}{2}$ mile on, and at right angles to the main line for distances of 1 mile westerly and $\frac{1}{2}$ mile easterly therefrom. From the observations made during the survey it appears that the general bearing of the strata and the quartz reefs is north 30° west for the first mile of the survey, but that further to the northward the direction of the strike gradually deflects and assumes a bearing north 20° west coincident with that of the main survey line. The two lines cleared on the apparent extension of the Lightning Hill and Garden Gully reefs respectively, follow this deflection, and show a remarkable parallelism to one another, notwithstanding that they are $\frac{1}{2}$ mile apart. These lines have been marked out on the apparent trend of the reefs with the nearest approach to accuracy possible under the circumstances; the outcrops of quartz and the strikes of the adjacent rock-bands having alone afforded indications for guidance in the work. The line cleared on the Lightning Hill reef starts from the first, or $\frac{1}{2}$ mile, cross line $1\frac{1}{2}$ chain westerly from the main survey line, close to the King of Prussia Mine; it ends at the last, or 3 mile, cross line, at a point $19\frac{1}{2}$ chains westerly from the main survey line. The principal outcrop of the Lightning Hill reef extends from the summit of Lightning Hill down to the King of Prussia Company's engine-house. There are in this distance (about $\frac{1}{2}$ mile) several auriferous "shoots," all of which appear to dip northerly. The eastern wall, or "back" is very well defined, and has a bearing varying from north 25° west to north 36° west, according to a number of bearings taken in the workings; occasional faults throw it to the west; its underlie is to the eastward. The quartz occurs in the form of a number of large and small veins and spurs, some richly auriferous and others nearly barren; the best stone hitherto found has been in the neighbourhood of the eastern wall. The true western wall does not appear to have been yet proved in the workings. For a mile beyond the King of Prussia Mine the line of reef is very indistinctly marked by occasional surface outcrops, or "blows," and straggling veins of quartz; but alluvial workings have been traced up to such outcrops in one or two places. The line cleared on the apparent extension of the Garden Gully reef commences on the second, or $\frac{1}{2}$ mile, cross line, at a distance of 67 $\frac{1}{2}$ chains westerly from the main survey line, and about 250 yards north-westerly from the Robin Hood shaft, extending to a point on the eleventh, or 2 $\frac{1}{2}$ miles, cross line 77 $\frac{1}{2}$ chains from the main line. Beyond this the line would for some distance pass through alluvial flats occupied for farming. For the first 10 chains the quartz outcrop and a characteristic sandstone band, with quartz leaders, indicate the line of reef with tolerable certainty; it then becomes indistinct for more than $\frac{1}{2}$ mile, after which the outcrop becomes and continues large and persistent to the extremity of the clearing. A parallel line, once known as the Undaunted, about 60 yards to the westward, has been worked from near the Robin Hood for $\frac{1}{2}$ mile to the north, but the outcrops on the Moon line are practically untested north from the Robin Hood workings. On the Moon or Garden Gully lines, auriferous alluvial deposits have evidently either headed from, or have been augmented in richness after crossing the line. Besides the two lines along which clearings have been made there are many lines of reefs within the area surveyed, but of these the only ones worked are the Black Forest reef, the Red Jacket reef, and Jacob's reef. An opinion is entertained by some that the Black Forest reef, which is only distant about 300 yards from the Lightning Hill line, is the true continuation of the Hustlers line. The general character of the alluvial working throughout the area surveyed indicated that the gold was derived from the wearing down of local reefs, and was not carried from more distant matrices. Hence the fact of alluvial gold being traced up to the vicinity of a quartz reef, and no further, may be regarded as tolerably sure evidence that somewhere in that reef occur auriferous shoots of stone. Although there is scarcely a reef which does not show along some portions of its course signs of having been tried by prospectors, those trials have been for the most part of a superficial character. Most attention appears to have been paid to the largest outcrops, or "blows" of quartz, and it is a matter of common experience that such bodies of stone are frequently barren within very short distances of rich spurs or leaders. The known tendency of gold to occur in separate shoots along lines of reef might frequently cause failure in prospecting, and to this alone may be ascribed the fact that so many apparently auriferous reefs remain unworked. Except those recognised by locally acquired experience there are no indications which could be with certainty followed for guidance in testing reefs. The presence of alluvial gold can be taken as a sure sign of the existence of an auriferous reef, but to discover the latter nothing but patient exploration by means of trenching, &c., will avail. The opinion is confidently ventured that sooner or later the Whipstick will develop into a good reefing district, and that reefs at present unnoticed, because they are not on known lines, will be worked to advantage. Besides the district mapped, the country generally from Lightning Hill to Flagstaff Hill, along the range connecting these two points, may be indicated as likely to reward properly conducted prospecting.

MANCHESTER GEOLOGICAL SOCIETY.

ACCIDENTS IN MINES.

The ordinary monthly meeting of the Manchester Geological Society was held on Tuesday, the chair being taken by Mr. HENRY HALL, Inspector of Mines, and an interesting discussion took place on a paper read at a previous meeting, by Mr. J. S. BURROWS, of the Atherton Collieries, "On Accidents in Mines," of which an abstract has already been given in these columns, and on a series of safety-lamp experiments which were made before the members at the Aldwarke Main Colliery, near Sheffield, during an excursion to that district on the 26th ult.

Mr. PEACE (Tyldesley) said he quite agreed with Mr. Burrows in almost everything he had set forth in his paper, and there was really very little that was open to criticism. With regard to the liability to explosion of gas, he quite agreed that it was the first "weight" that gave the most trouble, and that there was greater risk then than at any other time, whatever might be the state of the barometer. He fully endorsed what Mr. Burrows had stated with regard to the best system of ventilation, and as regarded the two systems of working—pillar and stall and longwall. He did not think if they were worked with the same skill and care there was really very much difference. One system, in his judgment, was as safe as the other; but the circumstances of a mine were of more importance as regarded the liability to explosions. As to the question of lamps, he quite agreed that it was very desirable the lamps should be provided and cleaned by the proprietors, and at their collieries they had for some time past been gradually introducing this principle.

Mr. TONGE said the question of the two systems of working longwall and pillar and stall had been very well treated in the paper, and with regard to good management and discipline, he quite agreed with what had been said. He thought, however, that if colliery proprietors would take more interest in establishing technical classes in connection with the collieries they would be the means of doing a great deal of good. With regard to barometrical warnings, his opinion was that, so far as the gas lying in the goaves was concerned, it rose and fell with the variations of the barometer; but so far as the gas in the coal was concerned, it was quite clear that slight variations in the pressure on the mercury had comparatively but little appreciable effect. With regard to the pillar and stall and longwall, his view of the two systems was that the only point wherein longwall might be said to be more dangerous was that with the great body of the men placed along the extreme face any outburst of gas was carried past them; but the system possessed one great advantage, that it enabled them to work to a very great extent without gunpowder, which was one of the principal sources of explosions. It also had other advantages in that it lessened the friction of the air, and it enabled the colliery to be far better kept under supervision than with pillar and stall.

Mr. M. STIRUP remarked that in the opinion of the French Commissioners the state of the barometer had little or nothing to do with explosions in mines, and that they occurred quite as frequently when it was high as when it was low.

Mr. GEORGE HOLLINGSWORTH said with regard to the barometer question he did not believe that any well regulated place showed much variation. Of course, in a still goaf any variations in the atmospheric pressure would be much more apparent than on the barometer. He did not attach much importance to the barometrical warnings. They seemed to amount to this—When the barometer is rising, take care; when it is falling, take care, and if anything happened in the four or five days following these warnings then it was—We told you so. With regard to longwall and pillar and stall, he should not like to say that one was better than the other. With regard to straight work, they were more liable to outbursts, whilst in longwall they were more liable to "weights" as the face was moving, so that the disadvantage of one system was practically counterbalanced by the disadvantage of the other. He did not think either could be said to be the best system so far as liability to explosions under ordinary circumstances in the working of a mine was concerned.

The CHAIRMAN observed that Mr. Burrows was to be congratulated on having given them a paper on explosions in mines which, to his mind, was a very valuable one, and that he had the courage of his opinions was evident from what he had said about shot-lighting. He had dared to say that no shot-lighting should take place unless all the men were out of the mine. So far as any mine that gave out gas was concerned, he (Mr. Hall) had long held the same view, and he was glad to be supported by a gentleman who was in daily contact with the management of collieries. With regard to the responsibility of managers he thought it was very important that the manager should have the entire charge of the colliery, and he had no respect for a man who would make himself the tool of an employer, or for an employer who would thus try to evade his responsibility. He was glad to see that the author of the paper condemned the ventilation of mines by pipes; when pipes were used for this purpose in mines it was evident the ventilation was so weak that they could not lift it to the face by means of a brattice, and it was simply helping a lame dog over a stile. In the face of the demonstrated fact that mine dust was so dangerous an element in explosions he believed that in the future much more attention would be paid to the watering of dry mines. In fact, he did not see how they were to meet this dangerous element except by adopting some system of watering the mines. With regard to the firing of shots, some particulars with reference to shot-lighting had recently been brought under his notice, from which it was proved that it was not necessary for a shot to "blow out" to cause an immense mass of flame in the working place. Shot-lighters had told him that this very often occurred even when the shot had done its work properly, and he believed it was not unusual for shots under ordinary circumstances to produce a flame that would ignite gas if any happened to be present. With reference to the barometrical warnings that appeared in the newspapers, although they had been regarded as of little or no value by some mining engineers, there was no doubt that a fall of the barometer did affect the gas locked up in a pit, but collieries ought to be so ventilated that any effect from a falling barometer should not occasion any danger. He thought, however, these warnings were certainly of some utility in the forecasts they gave of a probable falling barometer, and thus enabling preparations to be made. He was glad the reader of the paper had drawn attention to the great danger attendant upon mine dust and air partially charged with gas, as this was one of the most important questions with which mining engineers would have to deal. He believed there would be the greatest possible difficulty in getting such men as firemen, who had been accustomed to encounter small quantities of gas without any apprehension, to fully appreciate the serious character of the danger arising from even a very small percentage of gas in a mine in which were large quantities of dry coal dust. They could scarcely believe that a fireman with a cap showing in his lamp would, under the circumstances he had referred to, be proved to light a shot; but it was certain that these men in many cases did not appreciate the danger which was thus incurred. He was also glad to see that in his concluding remarks Mr. Burrows had put good ventilation before the question of lamps. Lately they had run into the danger of thinking too much about lamps, and too little about ventilation, which should be the first object seen to in securing the safe working of a mine. In answer to a question which had been put by one of the members as to whether explosions occurred more frequently in dry mines than in wet ones, the Chairman said that so far as his experience went there were more explosions in dry mines, but they must remember that wet mines were in most cases near the surface, where there was less danger or risk of an explosion taking place.

Mr. BURROWS, in replying upon the discussion, said he did not think there was any great advantage in the two systems of working as compared with each other, except that in longwall powder was not so much used; but if there was any gas in a mine it was more likely to burst out, and it was then bound to go past all the men. In pillar and stall there might be a great outburst, but with proper ventilation it would not pass any of the men. As to barometrical warnings, he thought a matter of far greater importance was proper attention to the ventilation, so that it did not become interrupted

through accident or neglect. When they had said all they could, and had got all the scientific instruments they could procure, they still wanted competent and attentive men underground. As to shot-lighting, he thought the tendency of legislation would be in the direction of prohibiting the firing of lamps in any mines whilst the men were down. With regard to the watering of mines, if he could be shown an efficient system he should be glad to adopt it; but he could not see that it would be of much service to water main roads unless they watered the working places also.

The discussion was then further adjourned to the next meeting.

Mr. H. S. MARTIN, Inspector of Mines (hon. sec.), said that since their visit to Aldwarke Main he had received a letter from Mr. Rhodes, in which he re-iterated his opinion that the Mueseler was decidedly the safest lamp. They had about 1500 in use at the collieries, and they never had a complaint.

Mr. BURROWS said they had about 1200 in use, and the men preferred them to any other.

COAL AND COAL PLANTS.

Mr. MARK STIRUP, F.G.S., read an interesting paper "On Coal and Coal Plants," of which the following is an abstract:—In the first portion of his paper Mr. Stirrup touched upon the geographical distribution of the coal fields of the world, and the probable conditions, terrestrial and meteoric, under which they were formed. He said that, although they must not hope to find coal under every latitude, yet explorations of various kinds had in recent years made us acquainted with the wide dispersal over the globe of deposits of coal belonging to that period of the earth's history known as the carboniferous period. We had, as they were well aware, brown coals and lignites belonging to later geological ages; but they were poor and insignificant in comparison with those of the older formations. When we compared the fossil plants of the carboniferous age from different English coal fields and there again with those coming from the various European deposits, we found a wonderful similarity in the faces or character of the flora. Again, if we crossed the Atlantic to those vast coal fields of the United States and Canada we found that two-thirds of the coal flora of America were common to it with that of the old world. Arctic voyagers brought home to us the same tale from the Polar regions, where, in the coal beds of Spitzbergen, similar fossil plants were found as in Europe. In the East Indies, China, South Africa, and Brazil, we also found their coal deposits to contain familiar species, and in equatorial regions, in the recently explored basin of the Zambesi, had been found a number of fossil plants well known in European coal fields. The uniform resemblance and analogy of the vegetation of this period over the whole world was a startling and remarkable fact, that might well arrest the attention of the most unobservant. It taught us that instead of the different climatal conditions which now obtained there must have reigned a uniformity in the diffusion of light and heat over the whole earth, and an absence of seasonal changes—such conditions, in fact, of which we had no evidence in succeeding geological epochs. From the nature of the flora the terrestrial conformation must have been widely different from that of the present day; great parts of the then existing continents must have been but slightly elevated above the sea, and the extent of some of these carboniferous forests almost baffle belief. The writer of the paper next referred to the methods which had been adopted for determining the relative ages of the different beds of coal of any isolated basin by an examination of the paramount and prevailing species of plants. M. Grand'Eury had divided the carboniferous flora, with which he included the permian, into five phases, and these again were divided into zones, marked by the advent of certain species, and their numerical preponderance in any zone. He classed by their flora the English coal fields in one great coal band, stretching eastwards from our shores, and including those of Flanders, Belgium, and Westphalia. To the south of this line the isolated coal basins, such as those of Central and Southern France, belonged to a phase of vegetation posterior to that exemplified by the English coal fields. In the classification put forth by M. Grand'Eury the lower coal measures of Scotland were placed in the first or earliest phase, and the lower or middle coal measures of England in the middle zone of the second phase. Proceeding next to consider the nature of the plants which went to form coal, Mr. Stirrup said they had seen from the examination of various coal beds that the vegetable remains of which they were composed belonged to different kinds of plants, and the question arose had this difference anything to do with the various qualities of coal? It had been said that certain coal found suitable for forge purposes were rich in Sigillaria, whilst coals suitable for gasmaking contained an abundance of ferns. From such circumstances many geologists had concluded that there existed a direct relationship between the plants which had formed the coal and the quality of the coal derived from them. Others, however, maintained strongly that these differences were due solely to the conditions under which the transformation into coal took place. The experiments of M. Garnot had shown that the age of the coal, and the different circumstances which had ruled at its formation, were not the only ones having influence over its properties. When all the conditions had been absolutely identical the different vegetable species had produced coals of sensibly different qualities. He did not, however, suppose for a moment that these experiments would settle the oft-debated question as to whether we were to seek in the nature of the plants themselves, or the conditions under which they were entombed, the explanation of their varying qualities. Probably both views were partially correct, for while under certain circumstances richness in volatile matters might be rightly ascribed to the nature of the plants forming the coal, yet we could not lose sight of the fact that beds of coal that had been greatly disturbed by earth movements might have lost some of their volatile substances, owing to, as suggested by Bischof, the readier access of water which favoured the evolution of gases. Other causes might be suggested for these differences, but their consideration would lead into a very controversial region, which could not be dealt with in that paper, and, in conclusion, the writer briefly touched upon the probable conditions which prevailed in the early periods of the earth's history, and the causes of the unique character of the carboniferous flora.

BLASTING ACCIDENT IN THE DIAMOND FIELDS.—The Cape papers, which came to hand on Tuesday, contain particulars of a shocking and fatal accident through blasting, which occurred in the Central Company's shaft (formerly Baring-Gould and Askins'), Kimberley, on Wednesday, March 19th, by which a miner named Thomas Howell lost his life, and another, named Carl Frandsen, a Dane, was seriously injured. It appears that the work of sinking the shaft—which is down into the hard rock, and about 10 ft. by 5 ft. square—is carried on by means of shifts or sets of men, who relieve each other at different times. One of these shifts was a little after ten on Tuesday night relieved by another, after the shots had been fired off. The men composing this shift were Thomas Howell, C. Frandsen, William Niness, John Clements. It was found that the charges in three of the holes had not exploded, and John Clements, who was charge man, fired them off after reporting to Mr. Evans, the overman. The party then went on with the work of clearing and drilling. Howell and Frandsen started drilling apparently in one of the three holes that had been exploded, while Niness and Clements proceeded to bore sump holes, commencing their operations about 2 ft. from the hole where their companions were engaged. An explosion soon afterwards took place, which Mr. Niness stated he at first thought was something falling into the tunnel. He was slightly hurt on the wrist, and Mr. Clements, who had been knocked down by the force of the explosion, was found to have sustained some similar trifling injuries. As soon as the dust was cleared away and a light obtained, it was found that poor Howell had been killed, and his unfortunate companion, Frandsen, so severely hurt that death would almost have been preferable under the circumstances. It is a sad and peculiar circumstance that the very work on which he was engaged when the accident took place was the first he had obtained. The poor fellow whose existence had so summarily been cut short was a man of much education and ability, and one who formerly occupied a good position. He was a native of Wales, and once held an office in a Cardiff bank. He was a musician and an author.

FIRE-DAMP INDICATOR FOR DETECTING SMALL PERCENTAGES OF GAS.

At a meeting of the North Staffordshire Mining Institute, held at Stoke-upon-Trent, on Monday—Mr. F. WAGGON presiding—Mr. J. R. HAINES (the secretary) read a description of Maurice's fire-damp indicator for detecting the presence of small percentages of gas. He said—If a mixture of air and possibly other gases be introduced into a chamber which is then closed air-tight, and if the chemical composition of the fire-damp within the closed vessel can by any means be so changed or destroyed that the density of the enclosed atmosphere becomes altered, then by the assistance of a suitable gauge the precise extent of this change of density can be measured, and the quantity or percentage of fire-damp in the air operated upon can be determined. The simplest way of changing the chemical composition of fire-damp under the above conditions is to destroy it or burn it out by means of a heated platinum wire. This process results in a reduction of the density of the atmosphere in the closed vessel in which it is carried out. It may be noted that ignited platinum has the property of inducing the slow combustion of carburetted hydrogen gas, the reaction being in no way interfered with by the presence of other gases which are not affected by the platinum. It is a simple matter to ignite a fine platinum wire, a single small cell of Grove's battery having sufficient power for the purpose. The burning out process must take place in a perfectly airtight closed vessel, otherwise it would not be possible to ascertain the alteration of density of the atmosphere consequent on the removal of the fire-damp. The gauge for measuring the amount of vacuum formed may consist of a glass syphon tube, or of an aneroid arranged as a gauge, which might be preferable. In either case the gauge is enclosed in the test vessel, and is observed through the glass, and its variations read by means of a scale attached to it. Bearing in mind the above facts, the following description of the form of instrument most convenient for practical use will be readily understood:—It consists essentially of a glass cylinder 7½ in. in diameter, closed at each end with vulcanite discs cemented in so as to be impervious to air. This serves as the air-chamber, and it is fitted inside with a fine platinum wire ½ in. in length, the ends of which are attached to short conducting wires terminating on the outside of the vessel in battery connections. In the interior of the air-chamber is fixed a glass syphon gauge partly filled with glycerine, and attached to this is a boxwood scale divided into inches and tenths of inches. The only communication between the inside and outside of the instrument is by means of two holes through the top and bottom of the air chambers. To the extension of these openings are rubber tubes extending respectively to the top and bottom of the instrument. These tubes pass through a small press made of brass, which, when screwed down, effectually closes them, causing the air current to become perfectly air-tight. A mouthpiece is fitted to the end of one of the tubes, and when the press is open the air in the air-chamber may readily be exhausted by suction, when the air which it is intended to test enters through the other tube and fills the vessel. In practice the mode of pressure is as follows:—The indicator having been taken into the part of the mine where the air is to be tested the air-chamber is entirely filled with it in the manner just described. The vessel having a capacity of only 6 cubic in. this is quickly done. The press is then screwed down and the instrument is closed. The battery may be carried in a suitable case with the indicator, or it may be left at a convenient place underground, in which case the instrument after being filled with mine air and closed would be taken to the battery. The gauge is read after the air-chamber is closed, and connection being made with the battery, the platinum wire is instantly brought to a bright red heat. Any fire-damp present is rapidly consumed, and when the gauge becomes stationary the operation is over, the battery is disconnected, and, after a short interval the gauge must be read a second time and noted. Should there be a difference between the two readings of the gauge, it is due to a change in the density of the air in the air-chamber caused by the combustion of fire-damp and the partial vacuum consequent thereon. There are tables with each instrument giving the gauge readings and the percentages of fire-damp from 1-10th of a per cent. upwards. One result of heating the platinum wire and the combustion of the gas in the air vessel is the heating and expansion of the air therein. But the air contained in the sealed end of the large limb of the gauge is heated and expanded in an equal degree with the air surrounding it, so that the effect on the gauge is neutralised. The sectional area of the small limb is 15 times less than that of the large limb, so that any movement of the fluid in the latter is multiplied 15 times in the former. It was necessary to have an arrangement of this kind for the convenience of reading small percentages of gas. With regard to battery power one large biobromate element, which may be contained in a case 5 in. by 3 in., by 8 in. deep is quite suitable for the purpose. This is perfectly portable, and as the indicator is made to be attached to or detached from it at will either the whole arrangement can be conveniently carried to any part of the mine, or the battery can be kept at one place, and the indicator only be taken into the workings, and when filled with mine air it will be closed and brought back and attached to the battery. In extensive workings more than one indicator could be usefully employed, the one battery serving for all. With such an instrument as described above there is no difficulty in correctly indicating the presence of 1-10 of a per cent. of fire-damp.

Mr. A. R. SAWYER, Assistant Government Inspector of Mines, said he had accompanied Mr. Maurice in some experiments underground, he taking his own Mueseler lamp, and Mr. Maurice his indicator. Where they did not tally it was owing to a leakage in the cylinder of the indicator, which did not affect the principle on which it was constructed, and no doubt the leakage could be made impossible. Mr. Maurice's indicator would be invaluable for the purpose of (1) checking the fireman's reports, which would be more necessary the longer the period was in which no gas was reported as having been seen; (2) ascertaining the exact quantity of gas produced in each district with a view to regulate the distribution of air against the several districts; (3) causing a more stringent supervision over blasting operations in districts in which no gas had been reported for over three months, but which would show smaller percentages than would be indicated by a lamp. The indicator corroborated the table which he (Mr. Sawyer) last year laid before the Institute as the results of experiments which he had made.

A BIG BLAST.—Recently the San Francisco Bridge Company received the contract for work on a section of the sea wall which will extend from Vallejo-street to Pacific-street, and which will practically continue the sea wall from Powell-street to Folsom. It became necessary for the bridge company to secure a quarry. A tract of 2½ acres was obtained, fronting on and extending into the bay, and forming a high bluff which forms the northern extension of Visitacion Valley. The bluff is about 60 ft. high close to the water's edge. It is expected to yield the 90,000 tons of rock required to build the section of the sea wall in question. Eleven tunnels in all have been run, and four were exploded recently, 11,000 lbs. of Judson powder being used. Each tunnel was 50 ft. long, and extended to an L, in which was the powder. From the L to the mouth of each tunnel rock and dirt had been tamped in as hard as possible. The four explosions were to occur successively, the first to loosen the cliff and make it easier for the second to become effective, and so on. The first explosion was awaited with some little apprehension, but when it occurred, with a dull, heavy sound, and it became apparent that fragments of stone were not to fly through the air, there was a sense of relief. The other explosions occurred soon after. Explosion No. 3 is stated to have been a grand affair. A great section of the cliff was toppled over, and huge boulders and tons of dirt rushed down to the water's edge. The blasts were pronounced successful, and the quality of stone, on subsequent inspection, seemed satisfactory. It was estimated by the engineers that the 11,000 lbs. of explosives had displaced in about 10 minutes 35,000 tons of rock and earth.—*From*

MANCHESTER ASSOCIATION OF EMPLOYERS AND FOREMEN.

The ordinary monthly meeting of members was held at the Technical School, Manchester, on Saturday.

Mr. W. H. BAILEY (the President) in the chair. The subject for discussion was a paper contributed by Mr. W. Mayer, of Newcastle-upon-Tyne, "On the Rise and Progress of Iron Founding, with Special Reference to the Northern District." The CHAIRMAN said, in introducing to their notice a paper on the rise and progress of iron founding it occurred to him that a few remarks generally on the historical development of the various arts dependent upon and in sympathy with engineering science might be of interest. He was often consulted by men who thought they were inventors, and his very first question was always—"Have you made yourself familiar with the failures and the work of other men in the direction in which you are now working; indeed, have you made yourself familiar with the whole published literature on the subject? Do you know the work of the best men, and do you think you are better than the best?" If an inventor could not answer these questions it was often useless to waste further time upon him. He had especially been struck by the number of gas-engine inventor who had tried to bring out engines, and who knew nothing about the various engines that were already in the market. A man who had already made himself acquainted with the wisdom, the experience, and who fully appreciated the trials and the troubles of his predecessors, would under ordinary circumstances, if he added his own experience, be more likely to do something useful, and certainly something more useful than one who worked on in ignorance of what those had done who had preceded him.

In the absence of Mr. Mayer his paper was read by Mr. F. WATKINS (the secretary). In the course of the paper the writer observed that even at the present day moulding and casting might be said to be an unmastered science with almost as many causes and agencies to assist in making bad castings, as there were the day when iron-founding was first practised, clearly demonstrating that iron-founding even as we now know it would not permit of the slightest relaxation of vigilance without a repetition of the disastrous consequences which frequently attended it during the earlier stages of its history. After tracing the progress of iron-founding from its earliest known introduction, the writer referred to the important era of its development, when cast-iron bridges were first introduced, the revolution caused by the establishment of the railway system, and the advent of the marine engine. With the introduction of the marine engine loam moulding has brought prominently to the front all the principal parts of an engine, even to the very bed-plates having then to be made in loam, and, as a natural consequence, it at that time came to be looked upon as the higher grade in moulding. It was about that time, also, the different branches in the trade began to assume distinct places in the foundry; there was the loam moulder, the sand moulder, and the core-maker, each doing his allotted part, and making that part his profession. Then, only in recent years had been added the dry sand moulder, and dry sand moulding, which was a combination of all the best features of loam and green sand moulding, which was fast superseding both loam and green sand for large and heavy jobs. In conclusion, the writer alluded to the degenerating state of green sand moulding in the Northern district, as compared with others further south. However unpalatable this might be it was, nevertheless, true; perhaps there was not sufficient inducement in the North to give it more particular attention than it was receiving at present, seeing that it involved too much risk to make marine work, which was the staple trade of the district in green sand. What was known as the London work had also almost left the district and gone to other districts, where they were more proficient in such work, and where infinitely more attention was paid to the making and getting up of patterns, and the manipulating of sands, and where there were better ideas of order and taste in small things. There was, however, one thing that could be said about the North Country moulders—if they were not moulders in every sense of the term, they were most expert, and second to none as moulders up or jobbing moulders, which part they were compelled to cultivate owing to the class of patterns they generally had to work off. As to the probable future of iron-founding, he believed there was a bright and developing prospect before it, whilst it had played no mean part in bringing about the manufacturing prosperity that we, as a nation, at present enjoyed.

A short discussion followed the reading of the paper, and the writer was somewhat severely taken to task. The usual vote of thanks was, however, accorded to Mr. Mayer for having taken the trouble to supply the paper, and Mr. THOMAS ASHBY, C.E., said it would have served a very useful purpose if it acted as an inducement to some of their members to take up the question of iron-founding, which had not received that attention from such an Association as their own that it certainly deserved. In South Lancashire they had some of the best moulders in the world, and he was sure it was a question which might be taken up very profitably by some of the members who were quite capable of giving them a very interesting paper on the subject.

SOUTH STAFFORDSHIRE MINES DRAINAGE COMMISSION.

On Wednesday the South Staffordshire Mines Drainage Commissioners started an engine of immense power to assist in the pumping of the Tipton district. It is situated at Prince's End, and has been named "The New Moat Pumping Engine." It has been made by Messrs. Hathorn, Davey, and Co., of Leeds, and is a horizontal compound differential engine, having a 44 in. high pressure and 76 in. low pressure cylinder, and a 10 ft. stroke, with air pump and surface condenser, fitted with a large number of 1 in. gun metal tubes. The condensed water is passed through a filtering cistern to free it from grease, and is then used as feed water in the boilers. The pistons are of the Good-fellow type, piston rods of Bessemer steel, cross heads of best hammered iron. The steam valves are of the Cornish equilibrium type, and are of gun metal. The engine is worked by Davey's patent differential valve gear, with passing gear. The pumps are worked through two wrought iron quadrants, built up of wrought iron plates, blocked with pitch pine, with hammered iron tie rods, connected with cross head by connecting rods. The main pump rods are of pitch pine, 16 in. square, connected to the quadrants by main caps of wrought iron, with gun metal bearings. The pumps consist of two 19 in. plungers with 10 ft. stroke, placed at a depth of 46 ft., forcing their water up an 18 in. column to the surface. The valve boxes stand back from the shaft in a chamber lined with brickwork. The bottom lifts, which feed up to the plungers, are 158 ft. long, with gun metal lined working barrels 19½ in. diameter. The buckets and clacks are of gun metal and of the Cornish type, with double beats. At each stroke of the plungers 245 gallons of water are forced to the surface, and the engine is capable of raising over 2,000,000 gallons in 24 hours. From the bottom of the engine pit, which is in the deep of the district, is an extensive system of levels extending to between 3 and 4 miles, which are still being pushed forward, thus enabling the water that has hitherto been pumped by six engines to be raised by the new engine. The levels when completed (which will be in a few weeks time) will drain mines that have been under water for years. The boilers, of which there are three, are Lancashire ones, made by Messrs. Hawksley, Wild, and Co., of Sheffield. They are 30 ft. long, by 7 ft. diameter, with flanged flues 2 ft. 9 in. by 2 ft. 5 in. diameter. The plates on the main pump rods are of steel, and were supplied by the Staffordshire Steel and Iron Works Co. (Limited). The whole of the engine, boilers, and pumps, together with the engine-house and pitwork, has been erected and fixed by the Commissioners' workmen, under the superintendence of their staff. Responding to the invitation of the Tipton District Committee, a numerous and influential company assembled to-day (Saturday) at luncheon at the Moat Colliery Office, near Prince's End.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. Wm. Ashby, of Manchester, are given in tabular form in the Stock and Share List page of the Journal.

THE AMERICAN METAL MARKET.

Messrs. MATTHEWS and WEBB, ore and bullion brokers, of Denver, Colorado, write on April 11—Any clear-cut, definite advance in the line of widespread improvement in trade cannot be reported yet. Excuses are heard in the shape of bad weather, change of administration, uncertainty of European politics, and other possible grounds; but none of them seem very satisfactory. The war cloud grows apace, and if it breaks we shall be flooded with orders in certain special lines, but general trade is more likely to be hurt than helped by it. Bradstreet's report shows the failures in 1885, up to the middle of March, to have been 3349, or 562 above same period in 1884, and 1552 above those of 1882. The New York surplus bank reserve stands at \$47,923,350, or nearly six times that at this time last year. The imports were \$7,743,000, against exports of \$5,907,268. The clearing houses report shows a loss in general business of 23 per cent. from last year, and, strange to say, almost all staples are lower even in the face of large possible orders for shipment to Europe.—SILVER has ruled steady.

COPPER continues its downward rush in a way to spread consternation among the stoutest-hearted operators, and cause a dread of trading either on the short or long side. Chili bars have again beaten the lowest record, and the cable quotes 45½ and dull, with best selected at 50½. These figures make the domestic pool price 10-11 c. per pound, and have driven Montana producers into selling for export again some 5000 tons of matte, but experience seems to teach no lesson, and Chili bars are to form the sliding-scale basis, and the allowances are such that the sale equals only about 9 c. per pound for the copper contents. An English writer of authority shows that the Panulillo (Chili) Copper Company worked in 1884 with copper 52½, at a loss of \$1500, while the Copiapo Company barely earned 4 per cent., and the famous Rio Tinto (Spanish) Mine scarcely earned 5 per cent. on last year's rates, and are now selling regulas at \$s. 3d. per unit. At New York some 400,000 pounds Lake sold at 10½ c. per pound, and 200,000 pounds Baltimore at 10-15 c. per pound, while at the close only 10½ c. and 10 c. respectively are offered.

Lead has taken a little dive, and presents a less encouraging aspect. The break came more especially at New York during the last few days of the week, when 500 tons were sold at \$3.60, common for April and May. This has set the pace for other competitors in the race, and there seems to be every chance of a short run of prices at a trifle lower basis, although no serious decline is probable. All the large holders remain very firm in their views, and will not budge from \$3.70, but there are enough outsiders on the present dull trade to supply all demands. The manufacturing interests are so cut up that low prices are earnestly sought, but, at the same time, the low rates on pipe and white-lead are causing a very heavy demand. At St. Louis the market has been stagnant, with buyers' and sellers' views wide apart, being at \$3.40 on one side and \$3.50 on the other. Lead will doubtless be more freely offered in that market after April 1st, when several large contracts terminate. At Chicago a moderate trade has been done at \$3.50, but with the drift strongly in the buyers' favour.

LAKE SUPERIOR MINES.—The Duluth and Port Arthur newspapers give evidence of the interest being taken in the mining industry on the north shore of Lake Superior. At Duluth the people are quite excited, and are only waiting until the opening of navigation for a large influx of miners from the Western States. At Port Arthur the interest taken in the mines is confined to the few mining men in the district, but it is genuine and practical. The Canadians are actually working their silver mines, while the Duluth people are merely prospecting and testing. The Canadians miners are quite near Port Arthur, and in the winter time there is a good sleigh road to them. In the spring the Kaministiquia will be bridged, and a colonisation road pushed through the township of Paipooze by the Ontario Government into the new mining region in it and beyond, which will give a great impetus to prospecting and the more extensive working of the mines. The Minnesota mines are not so accessible from Duluth, but the Americans have a railway already built part of the way, which will be completed this summer. That will give them an advantage over the Canadian mines, unless the promoters of the Thunder Bay Colonisation Railway push their project forward. There will be considerable rivalry between the mines on the Minnesota side of the international boundary on the one hand, and the Canadian mines in the province of Ontario on the other. The Canadians so far are taking the lead in the mining of the precious metals of gold and silver, but the Americans have developed their iron mines at Vermilion Lake in Minnesota on a grand scale. They have in connection with them their own railway, and harbour, and very extensive docks, with pockets at the lake shore. They are preparing for a very large output from their mines. The Canadians have to go slow until they have proper road and railway accommodation, but they are mining the new mines opened quite extensively considering the difficulties in their way. It may be interesting to point out the record of one of several dividend-paying mines on the American south shore and one on the Canadian north shore of Lake Superior. The Calumet and Hecla Mine, on the south shore, has paid to date \$25,150,000 in dividends to its shareholders. The Silver Islet Mine produced over \$3,000,000 in silver, and besides paying for the mine and all money expended in its development, and also the purchase of about 115,000 acres of land, the mine paid during the last three years it was worked \$616,000 to its shareholders, with a reserve fund of nearly \$200,000 more to continue work with, the whole of the company's property paid for, and their whole capital returned.—*Toronto World*, April 1.

UNITED MEXICAN MINING COMPANY (LIMITED).

Notice is hereby given, that the ORDINARY HALF-YEARLY GENERAL MEETING of Proprietors will be HELD at the Goldhill Coffee House, Gresham-street, London, E.C., on WEDNESDAY, the 8th day of May next, at One o'clock precisely, for the following purposes:—

To transact the ordinary business of the company.
To elect directors in the place of George Harris, Esq., and Lieut.-General John Walpole D'Oyly, who retire from office by rotation, and, being eligible, offer themselves for re-election.

To elect auditors for the ensuing year in the place of George Allen, Esq., who retires, and does not offer himself for re-election, and Frederick Alexander Maitland Nicol, Esq., who is eligible, and offers himself for re-election. Thomas Austin Sergeant, Esq., offers himself for re-election in lieu of Mr. Allen.

The Transfer Books will be closed on the afternoon of the 25th inst., and re-opened on the day following the meeting.

By order of the Board, DAVID GREENE, Secretary.
Office: No. 3, Great Winchester-street, E.C., London, 17th April, 1885.

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&c., on the quarry ready for work immediately. Any party or their
agents are invited to visit the quarry and judge for themselves.
Application by letter to the Lessee, Miss CATHERINE HARDY,
Harberton, near Totnes, Devon.

WANTED, a FEW CAPITALISTS to join in SECURING some
very valuable GOLD MINING and LAND PROPERTIES,
from which large profits can be made.
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delivery. Sample post free 12 stamps.

The DIRECT TEA SUPPLY COMPANY, Customs Chambers, London,
E.C.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

HARVEY AND CO. (LIMITED) v. CURTIS.

TENDERS will be RECEIVED by the Registrar, at his Office
in Truro, until SATURDAY, the 25th day of April instant, stating the
HIGHEST PRICE which will be given for the 16 heads stamps axle, with
15 lifters complete, together with 5 stamp plates and about 54 feet of chain,
now at the Mengern and Gombelack Mine, in the parish of Wendron, within
the said Stannaries, where the same may be viewed on application to Mr. KITTO,
Farmer, and for further particulars apply at the Registrar's Office.

HODGE, HOOKIN, and MARRACK, Truro.
(Plaintiff's Solicitors.)
Dated Truro, April 15th, 1885.

IMPORTANT SALE OF MINING PROPERTY.

The OKEL TOR and COTEHELE MINES, including ARSENIC REDUCTION
WORKS, MINERAL RIGHTS, comprising ARSENICAL TIN and COPPER
ORES, FREEHOLD LAND, and PLANT, MACHINERY, and EFFECTS.

TO BE SOLD, BY PUBLIC TENDER, as a going concern, in
One Lot, on WEDNESDAY, the 29th of April, 1885.

The property known as the Okel Tor Mine is situated in Calstock, Cornwall, on
the borders of Devon, and includes the LEASE of the MINES and MINERALS
worked in connection therewith, and freehold lands, plant, machinery, and
effects belonging thereto.

COTEHELE MINE is also situated in Calstock, about 1½ mile from Okel Tor,
and includes the LEASE of the MINE and MINERALS, and the plant and ma-
chinery on the mine.

The works, land, machinery, plant, &c., can be inspected (by order to view to
be obtained from Mr. C. L. NICHOLS, the Receiver and Manager, No. 1, Queen
Victoria-street, London) any day between Ten and Four o'clock up to the day
of sale. They are easily accessible, being about 6 miles from the Tavistock Sta-
tion on the London and South-Western and Great Western Railways.

Particulars and conditions of sale, and Forms of Tender, may be had of Messrs.
DAVIDSON and MORRIS, 40 and 42, Queen Victoria-street, London; of Messrs.
SMITH, PAUL, and ARCHER, Solicitors, Truro; of Mr. W. J. SPEAR, Auctioneer,
Callington; and of Mr. CHARLES L. NICHOLS, at his address as above.

THE SCOTTISH AUSTRALIAN MINING COMPANY (LIMITED).

Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the
shareholders of the Scottish Australian Mining Company (Limited) will be
HELD at the City Terminus Hotel, Cannon-street, London, on Friday, the
24th April inst., at Twelve o'clock at noon precisely, to receive the directors'
report and accounts, declare a dividend, and transact the other usual business;
and also to consider and pass a resolution to pay the sum of £15.0 to the two
daughters of Mr. R. A. A. Morehead, deceased, late the manager of the company,
as a recognition of his long and faithful services to the company.

The Share Transfer Books will be closed from Thursday, the 16th inst., until
Friday, the 24th inst., both days inclusive.

By order of the Directors,
C. GRÄINGER, Secretary.

59, Old Broad-street, London, 14th April, 1885.

MANUEL SANCHEZ, of lawful age, residing at the City of
BARCELONA, VENEZUELA.

FIRST.—Be it known by this public instrument of writing that, according to
other documents also of public character which I keep in my possession, that from
the year 1852, and in conformity with the Mining Laws then in force, some
COAL MINES, situated on the border of the River Unare, at El Tejar, jurisdic-
tion of the parish of Pirita, province of Barcelona, WERE AWARDED to
LINO J. MARRERO as his property under his dominion and usufruct for
working them, and for the extraction of their deposits.

SECONDLY.—That the lawful successors of said Lino J. Marrero, which at pre-
sent are Carmen, Sifontes de Marrero, Cora Marrero de Adrian, and Maria
Marrero de Meyer, have entered into a contract with me authorizing me to
proceed with the working of said mines.

THIRDELY.—That according to the original titles of property, as well as to the
resolution of the Executive of the State of Barcelona, dated the 21st day of
November, 1873, extending and proroguing for six years longer the term granted
for the working of said mines, said term has not yet expired.

FOURTELY.—That notwithstanding these lawful and authentic titles, Julio
Michand and Juan Marciano have denounced said Coal Mines situated on the
border of the River Unare, as above, and have received from the Federal Execu-
tive Government the permission to explore said mines, giving course to the
denunciation presented by said Julio Michand and Juan Marciano.

Therefore, now I do formally protest, and do so as often as required by law,
that I do not forgive nor do I abandon the rights that lawfully appertain to me
in said property according to the genuine documents of which reference has
been made before, and that I shall make use of said rights against whomsoever
it may be necessary or convenient.

I do say, declare, and execute this in presence and before the Registrar at
Barcelona, this 26th day of August, 1884.

(Signed) M. A. SANCHEZ.
Subaltern Registrar of the District of Barcelona.
Barcelona, 26th August, 1884.—21 and 26: The foregoing document was read
and signed by the grantor, M. A. Sanchez, who is personally known to me,
before me and the witnesses present, residents of this city—T. Francisco
Villalba and Bdo Gonzalez—to whom he is also known, and who also sign this
writ.

It has been registered under No. 3 of the seventh protocol, which this office
keeps in the third current quarter, stamps for the school revenue to the amount
of five bolivars having been obliterated on the respective protocol. Without
seal.
The Registrar (Signed), FELIPE URBANYA.

MINE "EL CALLAO," GUAYANA, VENEZUELA. 32,200 SHARES.

Gold in bars produced in the month of February, 1885, remitted
to Messrs. Baring Brothers and Co., London—9112.53 ozs.

DIVIDEND distributed for each Share, 16 francs.

(Signed) A. LICIONI, President.

(Signed) VICTOR T. GRILLET, Treasurer.

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large Colliery Company situated between Manchester and Liverpool,
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MEXICO.

JOHN PETHERICK, a Cornish Mining Engineer, after a visit to
this country for his health, is about to return to that Republic,
and is prepared to INSPECT, SURVEY, and faithfully REPORT
ON Mining or other Properties on reasonable terms.

Having had over 18 years' experience in the country, he is conse-
quently able to give an opinion likely to be of value to those who
may honour him with their commission.

Present Address: St. Agnes, Cornwall. After the 28th February,
all communications to be sent to Pachuca, Mexico, via New York
and El Paso.

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One Amalgamator will treat 10 tons per 24 hours; size, with frame,
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quicksilver required, 120 lbs. only. Cost of treatment, 3d. to 1s. per
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THE ALMADA AND TIRITO CONSOLIDATED SILVER MINING COMPANY (LIMITED).

NOTICE OF EXTRAORDINARY GENERAL MEETING.

Notice is hereby given, that an EXTRAORDINARY GENERAL
MEETING of the company will be HELD on MONDAY, the 27th
day of April, 1885, at Two o'clock in the afternoon precisely, at 47,
Finsbury Circus, E.C., for the purpose of confirming, or otherwise,
the Special Resolutions set forth at the foot of this notice, and which
were duly passed at an Extraordinary General Meeting of the com-
pany held at these offices on Friday, the 10th day of April instant.

By order of the Board,

JAMES ARTHUR MORGAN, Secretary.

Dated the 17th day of April, 1885.

PROPOSED RESOLUTIONS.

1.—That the company be wound up voluntarily, and that Messrs.
William Martineau and Burroughs Dickie Kershaw be the liquidators
for the purposes of the said winding-up.

2.—That the liquidators be and they are hereby authorised to
dispose of and transfer the business, moneys, assets, and property of
the company to the Almada and Tiritio Company (Limited), hereinafter
called the New Company, and to receive in compensation, or
part compensation, for such transfer, shares, or other interests in the
New Company, for the purpose of distribution among the members
of this company, the New Company paying and discharging all
liabilities incurred by this company, and the expenses of the
liquidation thereof.

3.—That (without prejudice to the general powers of the fore-
going resolution) the following scheme be approved for such transfer
as aforesaid:—

(a.) 80,000 fully paid-up shares in the New Company of £1 each to be
issued to the holders of the debentures (amounting to £20,000) in
this company in satisfaction of all claims on their debentures, the
liquidators, nevertheless, being hereby empowered to pay the half-
year's interest on such debentures, due the 31st December last, in
cash out of the assets of this company.

(b.) 130,000 shares in the New Company of £1 each, with 17s. 6d. per
share paid up thereon, to be issued to the members of this company
at the rate of one such share for every £1 share in this company.

(c.) All details for carrying out this scheme to be in the absolute
discretion of the liquidators.

(d.) That in the event of the New Company being unable or un-
willing to accept a transfer of the business, moneys, assets, and prop-
erty of the company, the liquidators be authorised and empowered
to sell and dispose of the business, moneys, assets, and property of
the company in such manner, and for such consideration as they
may think proper.

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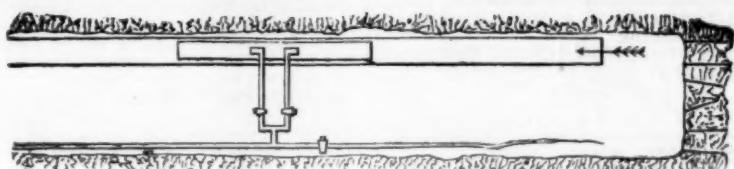


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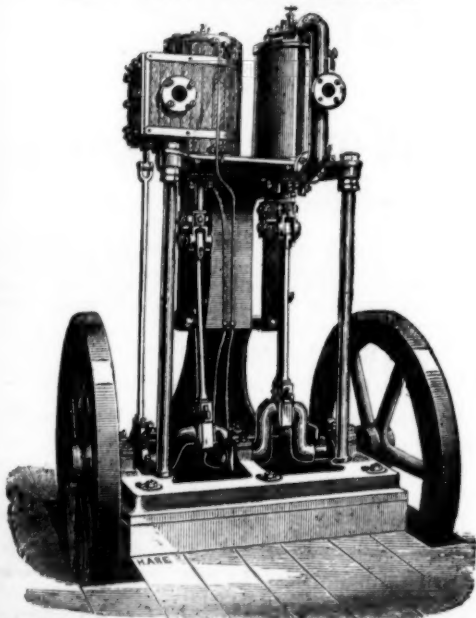
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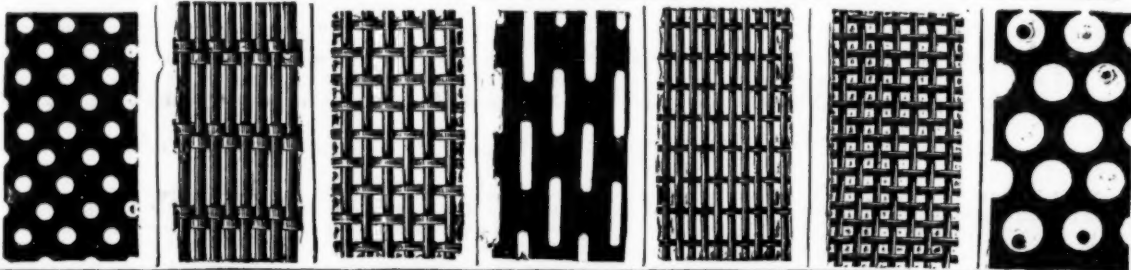
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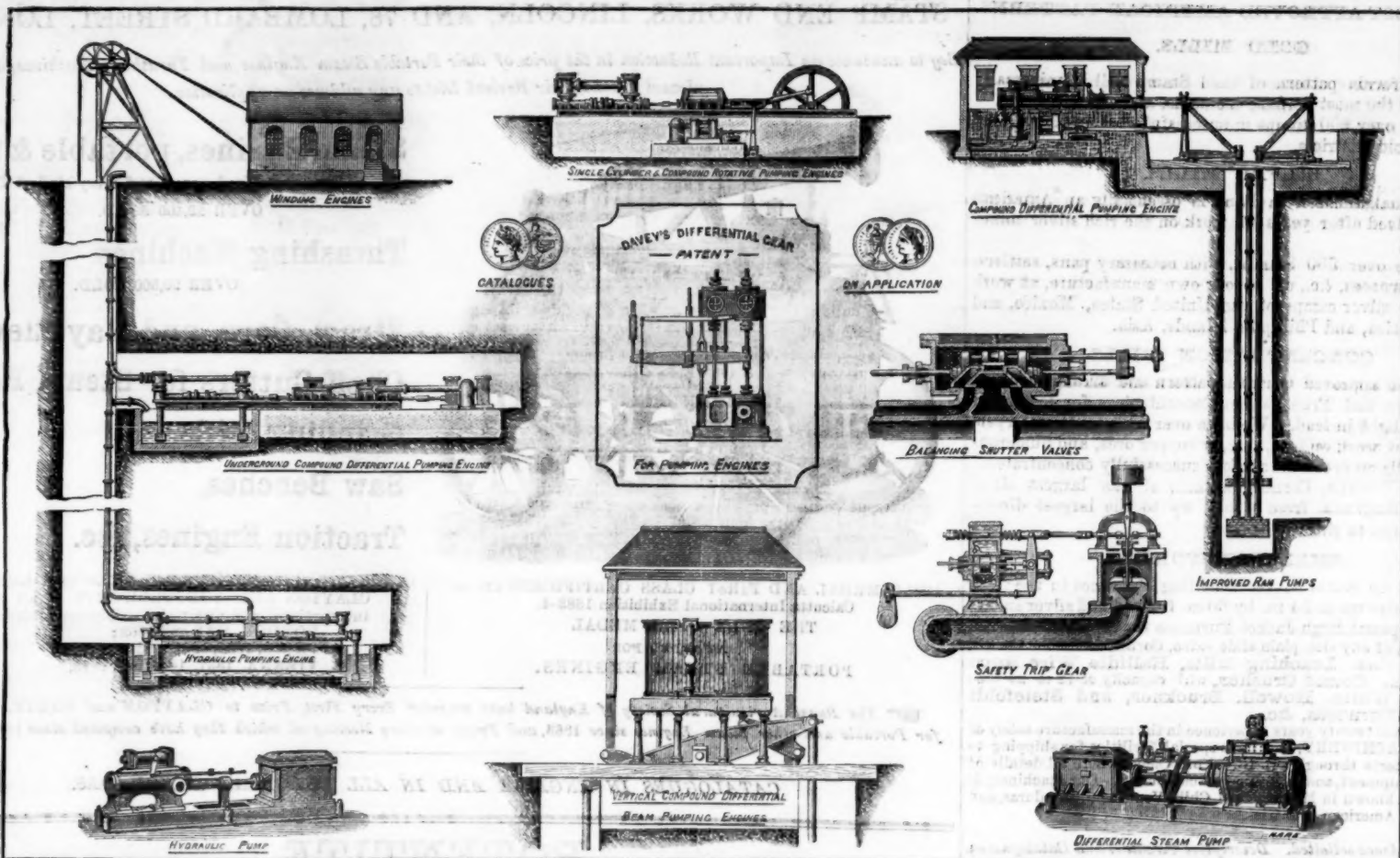
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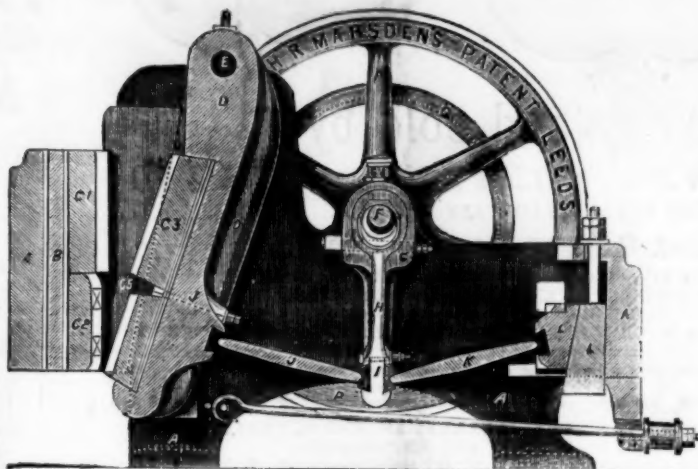
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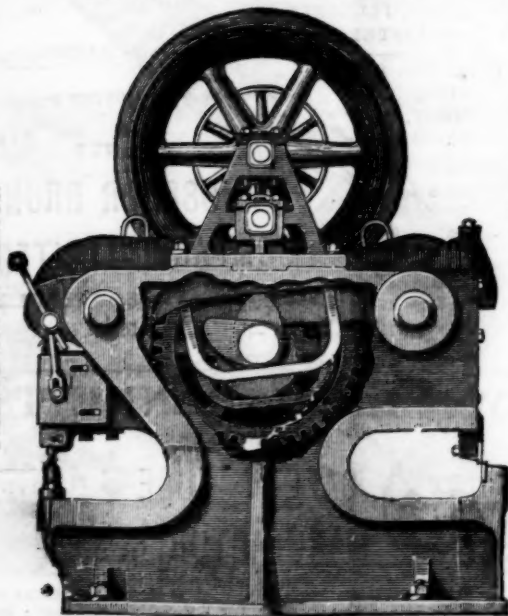
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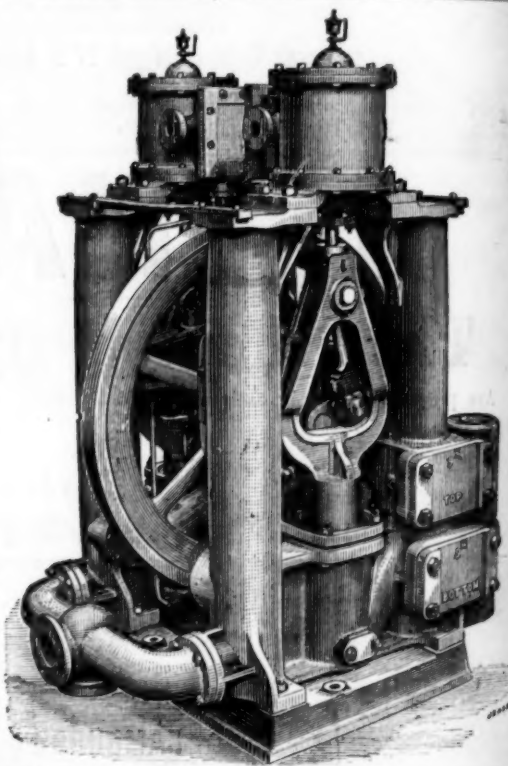
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